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The perceptions of Indonesian physical education teacher of online teaching barriers during COVID-19 pandemic

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Abstract

The covid-19 pandemic has significantly impacted the education system, especially through the use of online learning systems. This research aims to identify the problems experienced by physical education (PE) teachers in online teaching. The study uses a qualitative descriptive approach with a survey design. A total of 41 PE teachers in primary and secondary schools were used as research samples. Data collection techniques include observations, interviews, questionnaires, and documentation. The results showed that most teachers have not fully adapted to online learning. Through thematic analysis, we found that PE teachers encountered the following problems: online learning infrastructure, suitable lesson plans, institutional support, and teaching motivation. Based on the results, the recommendation were to train teachers on class management for either synchronous or asynchronous online teaching and develop lesson plan using a student-centered model with reduced cognitive load. The results of this research can be used for future studies oriented towards improving the online teaching pedagogy.

Keywords: Covid-19 pandemic, online learning, physical education teacher

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INTRODUCTION

Online learning is an inevitability in the era of technological advancement. Through online learning, students and teachers do not have to meet physically but only meet visually with information and communication technology devices in computers, laptops, mobile phones, and the internet network. The term online learning has been known since 1995 with website-based technology (WebCT), which is then known as the first learning management system (LMS) (Singh & Thurman, 2019). Since then, online learning has continued to grow with information and communication technology advancement. The peak occurred when the coronavirus outbreak 2019 or Covid-19 made online learning the only option amid the high rate of transmission of the virus (Coman et al., 2020). Covid-19 has finally been designated a pandemic by WHO because its transmission rate has reached millions of people in more than 200 countries in the world (Lin et al., 2020; Shereen et al., 2020). That led various stakeholders at the government level to issue rules for students to learn from home. This condition is based on the nature of the virus that is easily transmitted, making students and teachers one of the vulnerable communities infected with Covid-19; therefore, they have been instructed to eliminate face-to-face learning activities in schools and adopt online learning from home. The sudden online learning system makes teachers and students find it difficult to adjust (Octavia et al., 2021; Satrianingrum & Prasetyo, 2020; Wahyono & Husamah, 2020).

Physical education (PE) is one of the subjects in the primary and secondary education curriculum that must also organize online learning from home (Chen et al., 2020). PE is a subject that is mainly filled by practicum activities that demand intense communication between teachers and students to achieve the essential competencies (Capel & Whitehead, 2010). The

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practicum materials implemented in PE include big ball games, small ball games, swimming, and gymnastics. In addition to practicum material, PE is also filled with theoretical teaching materials that include knowledge of clean and healthy lifestyles and knowledge about the risks of drug abuse. Ultimately, physical education aims to develop physical fitness, motor skill, and a good knowledge of clean and healthy living behaviour (Sobarna & Hambali, 2020).

Online learning is defined as using electronic media as a synchronous and asynchronous communication tool in collaborative learning and teaching activities (Garrison, 2017; Jude et al., 2014). Online learning or e-learning is a breakthrough in the world of education. Advances in information and communication technology are giving rise to new trends in educational activities through computers, laptops, and smartphones with the support of a stable internet network for educational purposes. The concept of e-learning emerged in the mid-1990s when humans first became acquainted with World Wide Web technology. In essence, online learning offers flexibility for both teachers and students because it is not bound by place and time. This condition is certainly very relevant to the needs in the era of globalization.

The covid-19 pandemic has caused online learning to be implemented across the country. In this kind of health emergency, teachers and students have no other choice but to study online. The risk of transmission makes teachers and students 'forced' to be able and accustomed to online learning (Moorhouse, 2020). Although online learning has been widely applied in certain countries, the impact of Covid-19 makes the scope of online learning extends to developing countries such as Indonesia. Teachers who serve in public or private schools must migrate learning from conventional face-to-face methods to distance learning using online learning methods. This condition is experienced by teachers of all subjects, including PE teachers in elementary and secondary schools.

The challenges of implementing online learning for PE teachers are quite different from those in other subjects. PE teaching materials that are filled mainly by practicum materials demand teachers' creativity to switch it to the online learning model. In typical situations, PE learning involves intense communication between teachers and students. Teachers provide explanations, demonstrations, and feedback, while students develop their motor skills through motion demonstrations supervised directly by the teacher. The learning routine cannot occur optimally if learning is carried out online. In addition to requiring good supporting facilities and infrastructure, the ability of teachers to plan, implement and evaluate learning outcomes determines the success of online PE teaching. To date, there have been many studies that review the online learning process after the pandemic (Coman et al., 2020; Joshi et al., 2021; Moorhouse, 2020; Octavia et al., 2021; Wahyono & Husamah, 2020), but not many have specifically discussed the specific challenges faced by PE teachers. The purpose of this study is to analyze the perception of PE teachers during online learning. This paper is expected to identify the obstacles experienced by teachers during online learning so that it can be used as a reference for developing the quality of PE teacher teaching to improve student learning outcomes.

RESEARCH METHOD

This research uses a mixed-method approach by combining quantitative data and qualitative data. A total of 41 PE teachers in primary and secondary schools were involved in the study. The data collection instruments used are observations, interviews, questionnaires, and documentation. Observations were made using the participatory method, in which researchers were directly involved in the daily activities of the observed sample. While making observations, researchers participate in doing what the data source does. The questionnaire used questions to record teachers' three biggest problems during online learning. While the interview technique used is a structured interview with a confirmatory design. Interview guides are structured based on issues that often arise among teachers regarding online learning practices. Interviews are presented in open-ended questions to allow for a broader response from the sample.

Questionnaires are used to reach a broader range of respondents with questions related to the perceived barriers during online learning. Documentation collects primary data in learning implementation plan documents compiled by teachers before online teaching. The qualitative data analysis used in this study is thematic analysis. Thematic analysis is a method for identifying, analyzing, and reporting patterns (themes) emerging from data(Miles et al., 2020).

Table 1. Five-step data analysis used in the present research

Steps	Description of the process
1 Data reduction	Once data being collected, errors in the data file were being corrected. Data is also being checked for consistency.
2 Coding the data	Scanning the original data and generating open codes
3 Generating themes1	Comparing the original codes and checking the relevance before naming themes.
4 Categorizing the themes	Putting themes into a different category
5 Producing the report	Producing a scholarly report

RESULTS AND DISCUSSION

The data resulted in this study includes observational data, questionnaire data, interview data, and documentation. Observation data and questionnaires were conducted on 41 PE teachers who gave rise to the following description.

Table 2. List of online learning barriers

Variable	Percentage (%)	Problem description
Teacher	45	Low ICT literacy Difficult to migrate from offline to online Monotonous learning materials
Student	51	Low internet connection Low internet data package Limitations of online learning facilities and infrastructure Low student engagement
School	4	Limitation on lesson hours Lack of support facilities

From Table 2, it can be concluded that the most significant obstacles teachers face during online learning come from students (51%). Meanwhile, the school support factor is also perceived as an obstacle even though the percentage is insignificant (4%). Related to problems that arise from the student side, teachers most often encounter the limitations of students in accessing the internet. Limitations of internet access are caused by students not having internet data packages or not having smartphones. Online learning is a learning that is practically relying heavily on the internet as a medium of exchanging information between teachers and students. Today many internet providers present educational internet services at relatively affordable prices. This should be captured as an opportunity to engage more students in online learning. In the case of student addresses that are not reached by the internet network, schools can implement a home

visit strategy for those who simply cannot get into online learning. According to the teacher, the next thing that students often complain about is the lack of access to smartphones. Some students still rely on their relatives' phones or parents to follow the school's online learning. This study found a common solution to the problem that several schools in this study have implemented. The solutions are providing students with free smartphones, special rooms in schools that students can use to study online, and teacher visits to students' homes.

Lack of school support is also admitted to being another barrier that teachers found in the implementation of online learning. The teacher revealed that the trimmed lesson hours make the delivery of the material ineffective so that the basic competencies are difficult to be achieved by students. This is exacerbated by the student's lack of response to online learning. Through observations, it is known that students' level of engagement is relatively low. It can be concluded by the level of attendance, assignment collection, and student response in question and answer sessions. The cut in lesson hours is a derivative of the government's policy to reduce the rate of transmission of the Covid-19 virus in schools while keeping students not too burdened with too many online learning activities. Schools are required to be able to conduct training on teachers to adjust well to pandemic situations by migrating learning from offline to online both in content and delivery. Part of the 4% problem of school variables also mentions that schools do not provide supporting facilities and infrastructure for the implementation of online learning. Schools need to ensure the smoothness of online learning by providing facilities and infrastructure that teachers can utilize in optimizing teaching activities.

Furthermore, qualitative data collection is carried out with semi-structured interview methods to complement quantitative research data. Analysis of interview results in this study is generated using thematic analysis method. The themes that appeared in this study include online teaching activities from home, technical obstacles faced by teachers during online teaching, institutional support for teachers during online learning, and teacher attitudes towards online learning. Interview subjects were randomly selected from members of the population and selected eight teachers who were willing to be the subject of the interview. Through consideration of the ongoing pandemic, interviews are conducted using a combination of telephone and face-to-face.

Table 3 List of interview respondents

Pseudonym	Gender	Age (year)	Institution	Interview Date	Method
Ari	Male	31	Private highschool	21 January 2022	Telephone
Egi	Male	31	Public highschool	16 December 2021	Face-to-face
Bayu	Male	52	Public highschool	24 January 2022	Telephone
Dwi	Female	42	Public highschool	22 January 2022	Telephone
Galih	Male	45	Public highschool	22 January 2022	Telephone
Adnan	Male	28	Public highschool	23 January 2022	Face-to-face
Galang	Male	49	Public highschool	21 December 2021	Telephone
Kurnia	Female	33	Public highschool	25 Decenber 2021	Face-to-face

Conducted online teaching from home

Pandemic conditions make teachers unable to teach from school thoroughly. At a time of high cases of Covid-19 virus infection, teachers stated that teaching tasks are carried out from home. Teaching activities from home are often hampered by several things, including low internet

connection, power outages, disruption from family, and disturbances from the surrounding environment.

Low internet connection

Generally, teachers already have smartphones and internet data packages. However, the geographical condition of the teacher's residential address causes some teachers to be unable to access the internet smoothly because they only rely on wireless internet signals. This is in accordance with the respondent's recognition below:

> "During synchronous teaching sessions, the internet network in my house is often disrupted, so many students complain about the lag of videos and sounds" (Galih).

Power outages

Electricity needs are important in supporting online learning. Electricity is used to power computers and other electronic devices teachers use in teaching. Electricity also supports a smooth internet connection. Power outages often occur without prior notice, so teachers often experience obstacles while teaching because they cannot get internet signals and operate their communication devices. One of the respondents stated the following:

> "One of the disadvantages of teaching from home is that the electricity can go out at any time. In my area, there have been several power outages. If the power goes out, then teaching activities will stop because my laptop and internet connection in my house is very dependent on the availability of electricity. The case would have been different if I had taught from school. Our school has generator sets that can be enabled when there is a power outage so that the teacher's activities can continue to run" (Adnan).

Distractions from neighbours

Teachers who works from home is at risk of getting interference from family members. This makes the work atmosphere less conducive, as conveyed by the following respondents:

> "The routine of working from home is often interrupted by children. It's actually natural because my son is still very young that he does not understand if his father is at work, he should not take him to play." (Bayu).

Disruption of the surrounding environment

Conditions in the surrounding environment also often raise obstacles during teachers working from home, as recognized by the following respondents:

> "My house is located on the side of the highway, so often the noise of vehicles is heard clearly from my house, and it is really disturbing toward my teaching activities" (Adnan).

> "Often when I am teaching from home, there are guests who suddenly visit, at the moment I have to pause my work activities to greet my guests" (Bayu)

Geographical conditions cause internet signal coverage to be an obstacle for teachers often when teaching from home. This is because most teachers in this study did not access the internet using cable technology but instead with signal transmission technology from the transmitter station. The strength of the signal often depends on the weather, geographical location, and layout around the teacher's home. The need for signals is undoubtedly crucial in online learning, considering that reliable internet access determines the smooth communication and information in online learning. The activities of teachers during work from home are also largely determined by the availability of electricity. The case of power outages will undoubtedly hamper the learning

process carried out by teachers because it can affect the quality of internet connection and even affect the performance of electronic devices used.

The activities of teachers teaching from home also often bring up non-technical obstacles such as disturbances from the surrounding environment and family. In this case, the activity of working from home has a higher level of stress due to these factors (Suyadi & Selvi, 2022). Teachers should be given a conducive work atmosphere to deliver material to their students with total concentration and dedication. Through that effort, teachers can optimize the delivery of materials better. Based on the conditions and situations that the teacher describes during teaching from home. Difficulties will be experienced by teachers when they have to carry out their work from home because, of course, they have to share roles other than as teachers, as well as parents, and friends for children who are also unable to study in school amid pandemic conditions (Spadafora et al., 2022). It can be concluded that teachers should do their activities from schools to provide access to better infrastructure and a more conducive work atmosphere. If the teacher has no choice but to teach from home, then teaching asynchronously can be made an option. This is in accordance with what was applied by one of the respondents, Mrs Dwi.

> "I always prepare the material that I will teach at the beginning of the semester. The material I prepared was a theory module and a practice video. If the time comes when the lesson starts, I will give the teaching material to students through WhatsApp group. This, in my opinion, is more effective than teaching in sync with video conference technology" (Dwi).

Lack of institutional support

Institutions, in this case, schools must certainly provide support for teachers in carrying out online learning. The support can be implemented by conducting the following measures: providing LMS workshops to improve teacher competence, provision of infrastructure, and provision of an internet data package. Regarding this matter, some of the teachers who were respondents expressed their experiences as follows:

> "At my school, there is already a subsribed LMS. The fee issued by the school is commensurate with the quality of service we receive. So far, there have been no significant issues with the LMS I use." (Egi).

> "There are several free learning apps such as Google Classroom, Edmodo, and Quizizz. Schools do not require teachers to use certain applications; all are returned to their respective teachers. If I am, I usually use WhatsApp and occasionally use Zoom." (Adnan).

> "The school is actively sending teacher representatives to Semarang or Jakarta to participate in socialization and training in the use of LMS organized by the government" (Adnan).

> "My school once held training activities for teachers in order to do online learning" (Ari).
> "The provision of internet quotas for teachers from schools is very limited and is only given at certain times. Schools should be able to allocate more funds for teachers to buy internet data packages" (Dwi).

> "My school has a multimedia room that I can use to make practice videos for teaching purposes" (Sari).

The data above provides information that there has support from schools for teacher work through tools, programs, and incentives. Teachers can utilize as many facilities from the school

as possible to bring more quality learning through efforts to improve learning facilities and infrastructure applied in the classroom and the quality of delivery. Teachers can take advantage of the sports fields available in schools to record the movements to be taught in the lesson. Through the help of multimedia teams that have been provided, of course, teachers can produce interesting learning videos.

Technical difficulties while teaching online

Technical factors are often the determinants of the success of online learning. Technical conditions consisting of infrastructure and LMS are some things that need to be prepared.

Infrastructure on online teaching

Teachers need good infrastructure to be able to do online teaching optimally. The infrastructure consists of software, hardware, and internet connection. Some teachers acknowledge the limitations in terms of infrastructure used during online teaching.

> "The computers I often use in school to teach online are often problematic" (Ari).

> "There are no multimedia devices that I can use to create practice videos for students" (Galang).

Learning management system

Teachers who conducted online teaching through a paid LMS had a better experience than their peers who did online learning using free LMS.

> "Our school uses a special LMS, as far as I use there are no significant obstacles" (Egi).

> "Schools do not have a dedicated LMS; teachers are free to choose media options that can be used for free. However, I am often constrained by the app's limitations, such as the number of students who can attend at one time or other restrictions such as limited editing options. Students also often complain that the slow internet speeds could affect their learning if they use the LMS. That makes me often preferred only to use WhatsApp, which is basically a chatting app" (Adnan).

The fluency of online learning is strongly related to the availability of infrastructure that includes hardware, software, and learning media platforms used. According to Rahmadi (2021), most teachers in Indonesia carry out online teaching using their smartphones. Teachers prefer to use smartphones to teach online. After all, they are more familiar because they operate mobile phones for daily communication needs. Problems arise when teachers have to teach using computers. Often teachers rarely use computers because they are not familiar with their operation. The proposed technological devices used by teachers in online teaching should be devices that teachers use in daily basis, devices that can support online teaching, and devices that have added value(Pareja Roblin et al., 2018).

Personal problem with online teaching

Related to online teaching, teachers have personal problems such as low digital literacy, negative sentiment towards online learning, difficulty adjusting lessons to online systems, and decreased motivation.

Teacher's lack of digital literacy

The Covid-19 pandemic is an unprecedented event. On the other hand, online learning has long been predicted to become a significant practice as information and communication technology (ICT) keep progressing. The emergence of the covid-19 virus practically forced most teachers worldwide to switch to using online media in their teaching activities. Teachers without prior ICT literacy found themselves in problems while forced to teach online. This condition mainly occurs in elderly teachers.

> "If I just use WhatsApp, of course, I still can. But if told to use another application, I think I need to learn again" (Bayu).

> "During this time, I presented material conventionally, namely text, video links and discussions. I have not included the subject matter with complete multimedia packaging because I did not master the technology" (Galang).

Technology is something that is closely related to the development of society in the modern era. Technology is widely applied in various sectors of life, ranging from industry, transportation, and education. The application of technology in education is a breakthrough to increase student learning motivation and promote student-centred learning. The presence of more practical technological devices such as mobile phones and tablets makes these benefits easier to achieve (Gao & Zhang, 2020). Unfortunately, the adoption of technology in the world of education in the days before the pandemic is considered still far from expectations (Voogt & McKenney, 2017). Therefore, it is not surprising that the implementation of information and communication technology in the pandemic era is still often complained of as an obstacle experienced by teachers who have not used to teach using technology in the period before the pandemic. Pandemic conditions that force teachers to switch to online learning models require teachers to be able to catch up with the mastery of technological and communication devices.

Negative opinions about online learning

The majority of PE teachers consider online learning has not been appropriately applied to subjects with a practicum base, such as physical education and sports. The teacher admitted that he had difficulty delivering the material because he could not exemplify the movement directly. In addition, teachers also have difficulty in collecting responses from students. If the response is collected, the teacher has difficulty in providing correction and feedback to the student.

> "Online learning makes me unable to explain the material effectively. Usually, I include examples of movements that students can see directly. I can also observe the movements of students. Since online learning was enacted, I have had difficulty ensuring students' level of understanding and the extent to which students can meet the intended learning outcome that I set" (Egi).

> "My students often absence from class and do not collect assignments for a variety of unreasonable reasons. In a situation like now, it is difficult to control the engagement of students" (Galang).

> "The assessment I do on students becomes not objective because the school requires me to provide good grades while the student's ability is not as good as the grades obtained. Indeed there are demands that minimum competency standards must be lowered in order for students to pass" (Kurnia).

In face-to-face class routines, some materials in PE such as big ball sports, small balls, swimming, and gymnastics require teacher skills in explaining verbally and practically. Students

then imitate the movement as part of the skill mastery task. Teachers will correct the movements whenever necessary through direct feedback mechanisms. Thus, the teacher and student interaction process continues until students can finally master the movements exemplified by the teacher.

Online learning is a very different learning model compared to traditional face-to-face learning. Online learning is highly dependent on the availability and quality of information and communication technology (Gao &Zhang, 2020). In particular, PE teachers expressed concern that student ability levels would continue to decline if online learning trends in PE continued. PE must involve students to be able to interact directly with teachers in order to obtain maximum learning outcomes. However, reflecting on the existing conditions, teachers must keep thinking about online PE learning strategies through modules, motion show videos, and problem exercises and assignments that are expected to be alternative solutions amid the uncertainty of face-to-face learning in pandemic situations.

Teaching material adjustment

Many teachers judge that not all subject matter in PE can be taught online. There is no other way for the teacher than to remove the subject matter.

> "In the era of online learning, I do not teach swimming materials because it will be complicated for students to find a swimming pool to practice " (Kurnia).

> "My strategy is to remove practical subjects and replace them with theoretical subjects such as healthy living guidelines and education about the risks of drug abuse" (Egi).

Adaptation is a strategic step needed so that students can receive the subject matter provided during online learning (Moorhouse, 2020). Not all subject matter in PE can be optimally held online, so selecting particular materials based on school conditions, student conditions, and teacher abilities becomes something that should be recommended.

Teacher's motivation level

When carrying out online learning, teacher motivation often decreases due to several things including low levels of student attendance, low level of task participation, low achievement of student learning, and classes that are not conducive.

> "I admit that student learning outcomes in the era of online learning are not as good as when offline. Students tend not to be serious about martial arts. That is what often demoralizes me" (Galang).

> "The demands on students should not be too great. Although the demands of the task and material achievements have been designed as low as possible, there are still some students who seem not to intend to study" (Kurnia).

Teachers need motivation in order to carry out online learning activities smoothly. According to Rasmitadila et al. (2020), motivation is the teacher's capital in maintaining the quality of teaching amid all limitations in online learning. The findings in this study are in line with the findings of several studies that state that the level of teacher motivation in teaching in the online era is lower than during the face-to-face learning period (Daumiller et al., 2021; Panisoara et al., 2020; Rasmitadila et al., 2020; Strunc, 2020).

DISCUSSION

Fluctuations in cases of covid-19 infection make the policy of working from home often inevitable. PE teachers who work from home need to set strategies so that teaching activities can run

smoothly. This study revealed that the biggest obstacle of teaching activities from home is the environment that is not conducive. Similarly, Joshi et al. (2021) found in their research that revealed that working from home is not effectively done by teachers. However, suppose the teacher does have to teach from home. In that case, strategies that can be applied need to be considered, including carrying out asynchronous online learning so that teachers do not have to interact with students directly. This condition can minimize communication disruption due to weak internet signals or noise disturbances from the surrounding environment. If this is applied, then the teacher should try to prepare a stock of subject matter that can be distributed to students at any time.

The second major factor is infrastructure and technical assistance for online teaching. In this case, the availability and feasibility of communication devices, multimedia devices, reliable internet connection, LMS, and technical assistance should be prioritized. The covid-19 pandemic will profoundly affect physical education for the foreseeable future. During these unpleasant times, students will lose exposure to direct face-to-face access to teacher instruction, negatively affecting their motor learning. Teachers and schools should take immediate action to ensure they maintain high-quality education in these trying times. The need for suitable communication devices and fast internet support is the main capital for PE teachers who will teach online. Schools as institutions where teachers work should guarantee the needs of online learning infrastructure as much as possible and provide technical assistance to assist teachers in resolving technical problems faced during online teaching.

Physical education equips students with physical activity, sports, and health knowledge. During pre-covid times, PE learning is conducted face-to-face, allowing teachers to explain the subject matter optimally (Escalié et al., 2019). As for the pandemic, the habit of face-to-face learning must be abandoned because it is at risk of becoming a means of transmission of the virus (Anugrahana, 2020; Chen et al., 2020; Joshi et al., 2021; Nicola et al., 2020). The alternative to learning is through online learning. The challenge for teachers is to adjust the subject matter given online. Teachers should ensure that the material taught is accessible and easily understood by students. Materials taught online should also not be excessive and contain interactivities Student-centered learning model can be used as a reference for online learning design (Mukhtar et al., 2020). In this learning model, the teacher takes a position as a facilitator. Teachers prepare discussion and assignment materials that can trigger student activeness so that ultimately teachers can build student competence through online learning. Thus competence can be understood as an integrated and stable network of knowledge and know-how comprising normative behaviour, procedures and types of reasoning that students can use to manage complex situations. In order to develop these competencies, lesson plans often aim to integrate knowledge, skills, and attitudes, apply problem-solving approaches and foster the transfer of learning to everyday life(De-Juanas Oliva et al., 2016). During these difficult times, PE teachers must be aware that the situation may require them to teach from home or school. Given the hardship of delivering lesson from home, they need to anticipate this by design a lesson plan that suits the condition.

The last significant factor is teacher motivation while teaching online. Teachers have various emotional and motivational experiences that can influence their teaching quality during online learning activities (Panisoara et al., 2020). Through this research, PE teachers revealed that the dominant factor that influences their motivation in teaching is student engagement in learning. Since student engagement during online learning is relatively low due to several reasons, in this situation, through an interactive learning design with a student-centred model, teachers can strive to increase student engagement by displaying easy and fun learning(Pambudi, 2022). Schools, in this case, can mitigate the risk of teachers losing motivation by providing monetary and nonmonetary rewards, such as "best online teacher award", extra incentives for their hardship for online classes, monetary support for buying technical infrastructure and internet

facilities. Therefore, schools can provide support not only by hosting technical workshops for teachers but also by providing incentives.

CONCLUSION

Online learning is part of the ever-evolving advancement of information and communication technology. The covid-19 outbreak made the implementation of online learning happen faster than most experts predicted. Pandemic conditions make the education sector must adjust its activities to remain safe from infection but still achieve educational goals. Learning activities in the pandemic era require contributions from several parties to be optimally carried out. One party that can play a significant role in online learning success is the teacher. This research has revealed the barriers encountered by physical education teachers that are fully described in various aspects. Solutions are needed to help teachers overcome these obstacles, including conducting training consistently, improving infrastructure, and formulating learning design and evaluation of learning outcomes in accordance with conditions in the field so that learning goals can still be achieved even with all the limitations they have. Schools that have physical resources in the form of computer infrastructure, multimedia, and the internet should maximize existing facilities by training teachers to produce learning products that students can easily access. For schools with limited facilities, learning can be pursued through blended learning options with innovative, interactive learning design and able to reach students either with or without the help of internet technology. Institutional support also should aim to improve teacher motivation by providing incentives.

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