Physical Education Teachers' Reflection about their Learning in Post-Pandemic Era: A Mixed-Method Study

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Abstract

The purpose of the current study was twofold: (1) to explain teachers' perception on the impacts of COVID-19 pandemic on teaching physical education and (2) to explore teachers' reflexivity, including their post-pandemic teaching possibilities. Mixed-methods research with sequential explanatory design was utilized in this study. A number of 41 physical education teachers were recruited to participate in the study. The first phase was a quantitative method designed to collect survey data about the impacts of the pandemic on their teaching. A descriptive statistic was used to analyze the data. The result of the first phase facilitated the development of the second phase focusing on teachers' reflection on their teaching. Four teachers were selected to participate in in-depth interviews. Data were analyzed thematically assisted by a computer program for qualitative data analysis, namely ATLAS.ti. Result showed that the pandemic had impacted on students' motivations, teachers' workload, learning objectives, face-to-face classrooms, learning process, and assessment. It has also been revealed that teachers identified advantages of getting new learning resources and development. These included teachers' new skills of using technology for learning, increased creativity in teaching, and close collaboration with parents. The study concluded that the pandemic had impacts on the teaching PE as well as student learning. However, they eventually facilitated reflexivity on how PE learning would be in the future.

Keywords: *Post-Pandemic; Physical Education; Teaching; Learning; Reflexivity*

Introduction

Global pandemic of the Coronavirus had created multi-dimensional crises. It was simply from health measure to quarantine and limit social mobility to prevent the spread of this highly contagious virus that the crises seemed to happen. Such crises ranged from people's day to day lives to macro-economic systems. The pandemic had also revolutionary changed the ways social lives were organized and conducted. In the field of education, for example, the health measure had interrupted student learning and slowed down almost overall of children's development.

Like major countries around the globe, Indonesian government had decided to close schools at all levels. Despite unequal resources among schools, educational programs and services had to be delivered virtually (Dhawan, 2020). This dramatic change had become major challenges for each school, even for the most resourced ones. The programs had, however, needed to be run. While it required extensive efforts for most stakeholders, teachers' roles remained central in these efforts. In other words, teachers were forced to change and adapt with the unusual situations. In all limited resources, they needed to deliver the best service to their students they could do.

Physical education teachers seemed to experience barriers in achieving optimal learning outcomes within online environment and everchanging teaching strategies and methods. They might need to be prepared for flexibility and adjustability in their teaching in order to accomplish online learning. New pedagogy had to be adopted and contextually adapted. In fact, the transition toward online learning at the beginning of the pandemic had been so much depended on each individual teacher. More specifically, their knowledge and skills were important for being prepared to adapt with the rapid changes in education areas.

While the transition from traditional face-to-face to online learning had become challenges for major countries in the world, developing countries like Indonesia experienced more intense challenges. This was particularly true for the infrastructure and facilities to support online learning. These challenges were for both teachers and the students.

Despite online learning had become challenges, it has also opportunity of new learning for the next future educators as well as students. Learning from the pandemic, one impact of the public health and social measures has facilitated positive transformation in education. One among others includes the integration of information technology within education system. Though education has historically integrated technology to improve learning, the pandemic had enabled rapid and massive adoption of information technology in educational sectors.

Among other technologies was electronic learning (e-learning) through which learning had been helped during the pandemic (Subedi *et. al*., 2020). E-learning is a term combining learning area through internet, web-based training, and information technology assisted learning. Despite positive aspects, e-learning can potentially hinder direct communication and real interaction between parties in educational settings (Diab & Elgahsh, 2020). E-learning also limits students to participate physically in the learning process (Basilaia & Kvavadze, 2020). This is especially apparent for students with disability. Communication through various modes of information technology would remain incomplete and limited in facilitating social interaction. This can result into gap that prevents the accomplishment of effective learning and teaching (Cortez, 2020).

Specific to the school subject like physical education (PE), the pandemic had impacted its learning processes. The online learning in PE seemed to be more intensively challenging. This was especially true through which much of the PE content includes bodily movement and activity. However, the massive online learning from the pandemic has created new opportunities for being carried out in post-pandemic era. PE learning entails cooperation, teamwork, creative problem solving, tactical understanding. All of these can potentially be facilitated through online learning despite schools have now been open. Online learning in PE also allows students, teachers, and parents alike to share similar experience (Doucet *et. al*., 2020). In fact, online learning has provided possibility for teaching and learning in innovative ways that might otherwise not be accomplished through traditional face to face learning. These changes in education settings during the pandemic might become the lesson for teachers, students, and those working in educational institutions.

Despite these apparent phenomena, there seems to be little attention given to this particular issue. Therefore, the study focused on how pandemic have become reflected by the teachers and how they

envisioned physical education learning in the future. Would their teaching eventually come back to the pre-pandemic era? On the contrary, would they integrate their new pedagogical experience during the pandemic into their current teaching? More specifically, the current study aimed at explaining teachers' perception on the impacts of the pandemic on teaching PE and exploring teachers' reflection about their projection of future PE learning.

Method

The design of the current study included a mixed method research with sequential explanatory. This specific design suggests sequence to undertake a quantitative method prior to the qualitative method (Creswell, 2016). In this study, the quantitative procedure was intended to gain general insights about the impacts of the pandemic on teaching and learning in the classrooms. While in the second sequence, the qualitative analysis aimed at providing a way to go in-depth exploring participants' reflexivity about the impacts as well as the future of their teaching in post-pandemic era.

Taking place in a mid-size sub-urban municipality in Indonesia, the population included 167 PE teachers. An online questionnaire was developed and administered to all of those teachers through WhatsApp application. However, there were only 41 teachers who responded the questionnaire. In the qualitative phase of the study, a number of 4 teachers were recruited for further interviews. A protocol for semi-structured interviews was developed to guide the collection of information regarding their deep reflection.

Data analysis involved two steps. The first one was quantitative data being analyzed through Guttam scale providing quantitative description about the data. The second step included interview transcripts which were analyzed thematically with the help of computer program for qualitative data analysis called ATLAS.ti 22.

Results

The current study employed a mixed-method method to investigate impacts of the pandemic on teaching PE and teachers' reflection on the future of PE learning. More specifically, data described 11 indicators of perception as a result of experiencing teaching during the pandemic which could be divided into two streams: negative and positive perceptions. These negative perceptions included difficulty in the teaching processes, the decrease of students' interest in the academia, the decline of learning outcomes, increase of workload, and unaccomplished learning outcomes. Meanwhile, the positive perception included skill development in using media for instruction, the increase of teachers' creativity, facilitation of parent-teacher collaboration, the improvement of students' independence, and flexibility in the learning processes. The following diagram displays teachers' perception on the impacts of the pandemic on their teaching.
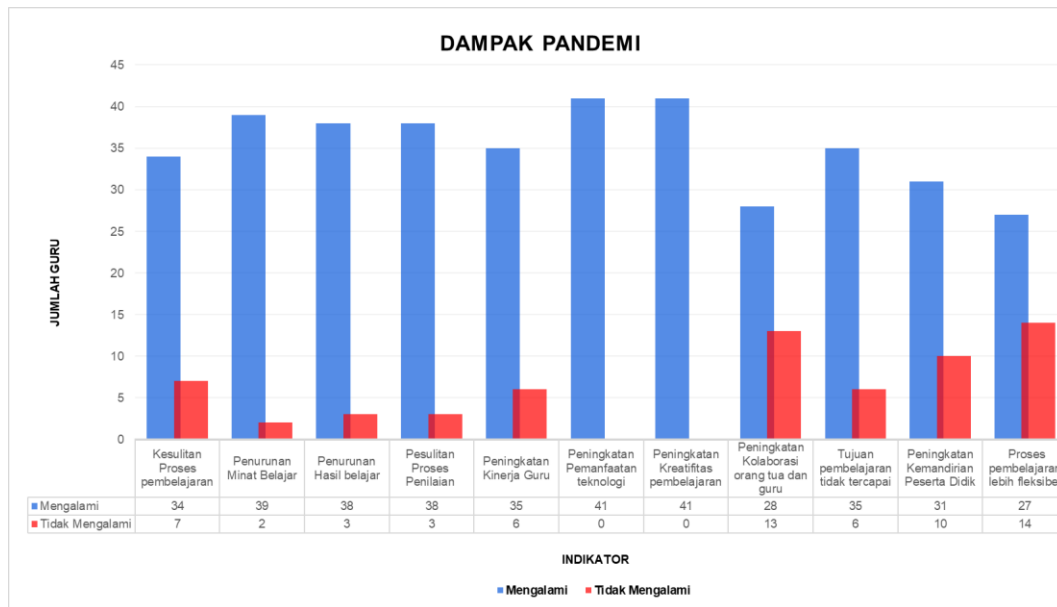
Diagram 1. Frequencies of teachers' perception on the impacts of COVID-19 Pandemic

The qualitative method was used to unpack reflections on how teachers taught during the pandemic, facilitated student learning in post-pandemic time, projected the future of their teaching.

The pandemic has increased the ability of teachers and students to use learning technology, which will also benefit the world of education in the post-pandemic era. This was also reinforced by the opinion of a teacher, who stated, "What we can learn from this pandemic is that we learn a lot about learning technology that can be used for learning in the future." During a pandemic, teachers must learn more and use different learning environments to support the learning process. This was also reinforced by the opinion of a teacher, who stated that "the existence of a pandemic indirectly forces us to continue studying various information technologies". Technology is an integral part of the connection and communication between students and teachers, especially during distance learning. By increasing the ability to use learning technology, teachers and students can create an effective and innovative learning process, considering that learning technology offers many advantages in all fields that can support post-pandemic learning.

Teacher creativity in the learning process has also increased due to the demands of the pandemic. The pandemic requires teachers to continue to innovate despite various limitations. This was also reinforced by the opinion of a teacher, who said, "In dealing with a pandemic, we have to be more innovative. One of them is the provision of material, because if the learning process is carried out continuously in the same way, students will get bored and their academic interest will decrease. This is in line with the opinion of other teachers that, "With the pandemic, we also learn more about various learning styles. We must continue to innovate so that learning continues even with various limitations." The teacher is a very decisive factor in the implementation of learning strategies. The teacher plays a very important role in learning. Teacher creativity is still needed to create interesting learning so that learning is truly effective during and after a pandemic.

When teaching during a pandemic, teachers also involve the parents of their students. This was also reinforced by the opinion of a teacher, who said that "parental involvement is necessary for successful online learning. During the pandemic, students studied at home so that teachers could not supervise directly. The teacher involves the parents of students as a substitute for the role of the teacher.

Parents can assist teachers in guiding and supervising children while they study online. Parents are also facilitators by providing the facilities and infrastructure needed by children during the learning process during the pandemic at home. Parents must be able to motivate their children to be enthusiastic about participating in the online learning process and be responsible for the assignments given by the teacher." The contribution of the parents of students is very important to support the success of their learning. The importance of communication between teachers, students, and parents is able to create better learning.

During a pandemic, habits of communication between teachers and parents become more open, which will be able to support the post-pandemic learning process. This was also reinforced by the opinion of a teacher, who said that, "Even though the pandemic is over, teachers still involve the role of parents as a form of coordination and discuss it if there are children's obstacles at school. So communication with parents is not only at the time of taking report cards like in previous years. By establishing good communication between teachers and parents of students, positive things can happen in monitoring the educational development of students during online learning.

Discussion

The COVID 19 pandemic has impacted education sector, particularly on the way learning has been conducted. The online learning had to be adopted intensively while the traditional face-to-face learning had remained less optimal during pre-pandemic era. Challenges were apparently faced by teachers in this study. It seemed that all students had the same storm to deal with, but they did not have the same boat to sail along. Aligned with the information in the literature, one important factor included students tended to not have devices needed for online learning (Ariesca, *et. al*., 2021). In addition to the equipment available for learning, PE learning was especially hindered by the nature of the subject emphasizing physical and psychomotor activities.

Teachers had also be thoughtful when identifying contents that were suitable for the condition under the health measures. With limited situation, both teachers and students needed to be on the same page when achieving the minimum competences prescribed by the curriculum. Time availability was definitely a thing to consider when designing and planning the lesson. Participants of the current study had acknowledged this different situation as way less effective in comparison to the traditional learning. Some area in the curriculum needed to be delivered through face-to-face interaction, especially when it came to concept of movement or games.

The interest for learning is also one central variable for learning progress. Students who are highly motivated would be able to focus their attention to what they are learning. Learning interest is a condition that showed the tendency to pay attention or get interested in particular illustration (Ricardo & Meilani, 2017). Interest can also mean the degree to which an individual likes or involves in an activity (Hong *et al*., 2014). The role of teachers is important to increase students' interest in learning. One of the strategies included making the learning enjoyable and motivating students. These were something challenging during the pandemic times.

Additionally, another challenge included teachers' difficulty in assessing student learning. Learning assessment is based on three principles: meaning, transparency, and fairness (Rigianti, 2020). These three principles cannot be fairly fulfilled by teachers, especially in terms of the principle of justice. The teacher cannot directly supervise the students work on assignments. As a result, the teacher cannot evaluate the achievement of learning neutrally according to the abilities of students. Physical education, which is oriented to movement tasks, causes bias in making assessments. Ongoing online learning makes students unable to socialize with other students and teachers. This can hinder the teacher in conducting attitude assessments.

At least the assessment of absolute learning outcomes is carried out in accordance with the established provisions or norms (Mulyasa, 2017). In its implementation, the assessment must be fair, objective, and open to various groups so that decisions about student success are clear to interested parties (Sawaluddin, 2018). Online learning causes a decrease in the quality of student learning outcomes. The quality of learning is determined by the teacher. The teacher is a very decisive component in implementing learning strategies (Damanik, 2019). The pandemic has made teachers less flexible in providing material and monitoring the development of students as a whole. Parents also have less control over children's activities, and parents' understanding of children's development is lacking so that learning is not optimal (Tsalisah & Syamsudin, 2022).

The need for synergy between teachers, parents, and students is needed to maintain the quality of student learning. Student learning success also depends on internal and external factors (Susanto, 2016). The influence of parents greatly determines the direction of the future development of children (Jannah & Umam, 2021).

After the COVID-19 pandemic, learning shifted more toward utilizing the technology they had used during the pandemic. The COVID-19 pandemic has not only had a detrimental effect on the education system, but unknowingly, the COVID-19 pandemic has also had a positive impact, one of which is related to education in Indonesia. The positive effects of the COVID-19 pandemic can certainly motivate people to go through difficult times to continue to achieve educational goals in Indonesia so that they can be more advanced.

This pandemic is a bridge to realizing a tiered competency of course at a very high level (Widayanti, 2023). In this era of increasingly sophisticated technological disruption, teachers and students are required to be proficient in the field of learning technology. The mastery by teachers and students of various learning technologies is a challenge for them. Home study policies are able to force and accelerate them to master digital learning technology according to their needs (Rozikin et al., 2023). These demands allow them to find online media that can serve as a substitute for direct classroom learning without reducing the quality of learning materials or learning achievement targets.

Various distance learning media were tried and used. Students and teachers are increasingly controlling the ability to use and access information technology through the use of digital media. After educators are able to master various online learning tools, ideas will be created regarding more varied learning methods and models, which have never been done by educators.

The use of information technology in students completing assignments can also lead to creativity among them in developing the knowledge they already have. With a variety of learning methods from teachers, students can create creative learning products that can develop thoughts through their own analysis without leaving the subject matter that has been delivered by the teacher. Another thing that can be taken into account with the existence of a pandemic is collaboration between teachers, parents of students, and students.

Conclusion

The existence of a government policy to carry out distance learning through online courses can be a lesson for teachers and provide the benefit of increasing awareness of the need to master current technological advances and overcome problems in the educational process. Various benefits can be projected in the post-pandemic period to support more advanced learning.

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