Teacher professional development during COVID-19 pandemic: Opportunities and challenges

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ABSTRACT

In the face of the unprecedented COVID-19 pandemic, Teacher Professional Development (TPD) has encountered both new opportunities and daunting challenges. TPD refers to any activities conducted by teachers to upgrade their teaching skills in order to maintain their professionalism. The activities of TPD have recently been greatly affected by the COVID-19 pandemic, resulting in the termination of almost all TPD activities. This study aimed to explore the experiences of English language secondary school teachers in Yogyakarta regarding TPD activities during the COVID-19 pandemic, focusing on the opportunities they encountered and the challenges they faced. Using qualitative approach and descriptive qualitative research design, the study involved four English language teachers at two Secondary Schools in Yogyakarta as the participants. In-depth interviews with these four participants were conducted to achieve the objectives of this study. The findings of the study discovered that mastering the technology, improving the competency in designing online class, improving the competency in class management skill, and building peer collaboration among teachers were all the opportunities experienced by the teachers in conducting TPD activities during the COVID-19 pandemic. Moreover, teachers' lack of digital competency, unstable internet network, limited number of TPD activities, and inadequate support system were the challenges experienced by these teachers in conducting TPD activities during the COVID-19 pandemic. These findings underscore the importance of proactive and flexible approaches to TPD, particularly during times of crisis, to ensure the continuous development and effectiveness of teachers in challenging educational.

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1. Introduction

An array of research about Teacher Professional Development (TPD) in any level of education has been broadly conducted nowadays. Having been stipulated as a profession in Teacher and Lecturer Law No. 14 Year 2005, a teacher is defined as a professional educator with the main task of educating, teaching, guiding, directing, training, assessing and evaluating students in early childhood education through formal education, basic education, and secondary education (Prihatin, 2020). Professional teachers are demanded to have four competences comprising pedagogical, professional, personal, and social competence (Hai & Linh, 2022). The four skills are in fact in line with Teacher and Lecturer Law No. 14 of 2005 article 28 which mentions that professional teacher must at least meet the

competency requirements, including pedagogical competence, professional competence, personal competence, and social competence (Prihatin, 2020).

In the National Education Standards, these four competencies are further described as the followings: (a) pedagogical competence is the ability to manage learners' learning which includes students' understanding, designing and implementing learning, evaluating learning outcomes, and developing students to actualize the various potentials they have; (b) professional competence is the ability to master extensive and in-depth learning material that enables teachers to guide students to meet the competency standards set up in National Education Standards; (c) personal competence is a steady, stable, mature, wise, and authoritative personal ability and is an example for students and noble ones; and (d) social competence is the ability of educators as part of the community to communicate and socialize effectively with students, fellow educators, education personnel, parents/ guardians of students and surrounding communities. In order to obtain these competences, Continuing Teacher Professional Development (CPD) need to be carried out.

Teacher Professional Development (TPD) constitutes activities conducted by teachers to upgrade their teaching skills in order to maintain their professionalism (Windiarti et al., 2019; Hadi et al., 2021; Park & Yi, 2022). A study conducted by Darling-Hammond, Hyler, and Gardner (2017) mentioned that TPD is one way to enhance teachers' skills that students need to learn for further educational level. However, in the beginning of 2020, a pandemic called COVID-19 has disrupted and affected humans' life around the world, including in Indonesia (Rahayu & Suprina, 2021). In addition, the emergence of COVID-19 has an impact on many aspects of life, including education. Teachers and students have shifted the teaching and learning platform from face-to-face learning in the classroom into online learning (Almahasees et al., 2022; Sumra et al., 2022). Likewise, TPD activities which previously could be done face-to-face have recently been only conducted online.

The immediate need for an emergency condition in education, indeed, has provided teachers with many opportunities to gain various TPD activities which eventually can upgrade their competencies (Donitsa-Schmidta & Ramota, 2020). For example, the government's instruction to carry out teaching and learning process from home (SFH = School From Home) have forced teachers to upgrade their competencies in teaching. All teachers who used to teach students in the classroom have to adapt a new way of teaching and deliver their teaching materials into virtual classroom (Hernández & Gómez, 2022). Such condition forced the teachers to learn fast about how to prepare virtual class very well so that the learning outcomes can be maintained. Whilst this situation seemed to bring hurdles for the teachers, in fact, they got many opportunities as the results of their activities in preparing the virtual class such as the teachers learn how to design the online learning, the teachers have a wider opportunity of using the technology like e-learning and other online tools to support the learning process, as well as the teachers learn how to teach using learning applications such as Zoom, Ms Teams, Google Classroom, Google Meeting, and so forth (Anshari et al., 2016; Lockee, 2021; Chunkhare & Jadhav, 2022; Faggiano & Fasanella, 2022). However, while the teachers have many opportunities in doing TPD as the result of COVID-19 Pandemic, they also experienced some challenges in conducting TPD during COVID-19 Pandemic. This is interesting phenomena. This study, is then, aimed at investigating teachers' experiences in conducting their TPD during COVID-19 Pandemic, especially those who taught English subject at secondary schools in Yogyakarta.

2. Literature Review

As mentioned earlier, teaching and learning process was shifted from conventional classrooms into virtual ones during COVID-19 pandemic. Besides resulting in teachers' burdens in teaching preparation, it actually gives some opportunities for teachers to conduct TPD which results in their capacities improvement as teachers such as the enhancement of knowledge about theuse of technology for learning, as well as the increase of their communication skills and social competencies (Salih & Omar, 2022). Teachers' opportunities of conducting TPD during the COVID-19 Pandemic demonstrated by Sudrajat (2020) are explained as follows:

2.1. Mastering the technology

The COVID-19 pandemic has challenged the ability of teachers to use technology in virtual classrooms. It is unlikely possible to run the teaching and learning process unless a technology, even

in a very simple one such as mobile phones, is used during COVID-19 pandemic (Silvhiany, 2022). Thus, teachers need to be able to operate any technology to assist them deliver the subject. This emergency has forced the teachers to master the technology faster (Ferri et al., 2020; Rozi, et al., 2022). Sudrajat (2020) mentioned that the use of technology-based media,laptops or gadgets, or smartphone is very important for education during COVID-19 pandemic. Furthermore, Almazova et al. (2020) shared their opinions that positive impact of the electronic educational environment is enabling a higher degree of interactivity and collaboration among teachers and students. Finally, Almazova et al. (2020) added that many scholars noted the positive impact of the electronic educational environment on improving the quality of the educational process.

2.2. Improving teachers' competency in designing online classes

Teachers must improve their competence in designing online classes during this COVID-19 pandemic because all teaching and learning activities are conducted online. Teachers must also be able to adapt the learning model to the existing situation. Teachers in this pandemic situation should be able to organize their teaching activities by making effective use of modern technologies, i.e., understanding pedagogical issues of organizing an online lesson, discussions during a webinar, etc. (Almazova et al., 2020; Supriyanto et al., 2020). In addition, this COVID-19 situation forced all teachers, including those who were hesitant and procrastinated in their decision, to understand how to familiarize themselves with the various Learning Management Systems and digital platforms that are provided by the school (Donitsa-Schmidta &Ramota, 2020; Poonputta & Nuangchalerm, 2022). This way, teachers have to learn how to use Google Classrooms, Google Meeting, Moodle, Schoology, Zoom Meeting, Microsoft Meeting, and soforth.

2.3. Building peer collaboration among teachers

As teachers have to adapt their conventional teaching into virtual ones quickly, they need to work together with their peers. Whilst the school principal has the responsibility to ensure that all teachers are technology literate, the more knowledgeable teachers are supposed to assist their colleagues who have problems in using new technologies. This peer mentoring system leads to peer collabotation at school. Donitsa-Schmidta and Ramota (2020) in their study demonstrated that during COVID-19 pandemic, peer collaboration, shared learning and mutual aid among teachers at school increased.

While teachers have many opportunities to conduct TPD during COVID-19 pandemic, they actually also face some problems. Almazova et al. (2020) in their study about the opportunities and challenges of Russian Higher Education during the COVID-19 based on the teachers' perspectives stated that the lack of pedagogical digital competence and teachers' readiness in implementing the technology-based learning are the vital issues. The following paragraph explains the problems in conducting TPD during COVID-19 pandemic.

2.4. Teachers' Lack of Digital Competency

Teachers' lack of skill to work inthe new digital educational environment is an acute problem (Gillett-Swan, 2017; Almazova et al., 2020; Razak et al., 2022). Moreover, Sudrajat (2020) argued that teachers' lack of technological competencies disturbs the online learning process. Despite, many efforts to introduce technology into the teaching and learning processes of teacher educationcolleges, too many teachers were lack the necessary knowledge to cope (Donitsa-Schmidta & Ramota, 2020). Further, Nambiar (2020) said that some teachers evenfelt that their lack of computer skills came in the way of using the online teaching platform effectively.

2.5. Unstable internet network

The issue about bad quality of internet network usually comes from the teachers that live far away from the city. In Indonesia, this issue is usually happening because there is still a lack of knowledge about technology in remote areas and the lack of development of facilities and infrastructure for technological development in areas far from the city center (Smeins et al., 2022). Nambiar (2020) demonstrated that technical issues like poor connectivity, power cuts, broadband issue, poor audio, and video quality as the main issue.

2.6. Limited number of TPD activities

Restrictions on activities aimed at stopping the spread of COVID-19 have resulted in a decrease in the frequency of TPD activities which are usually held by schools and the government. Finally,

teachers have fewer opportunities to carry out activities that support their professionalism as teachers during the COVID-19 pandemic Teachers have a limited capability of attending professional development workshops during the COVID-19 pandemic, since no such workshops have pre-existed (Trikoilis & Papanastasiou, 2020).

3. Methodology

This study employed qualitative approach. Creswell (2012) stated that qualitative approach is exploring and developing a detailed understanding of a central phenomenon (p.16). Descriptive qualitative design was employed in this study. According to Lambert and Lambert (2012) descriptive qualitative design is done to investigate or explain certain phenomena. The researchers conducted this study at two Secondary Schools in Yogyakarta. The research was conducted during July-August 2021. The first school was one of Muhammadiyah Junior High School in Yogyakarta and the second school is one of State Junior High School in Yogyakarta.

Four English language teachers of two Secondary Schools in Yogyakarta were chosen as the participants of this study. All of the participants were female English language teachers at Secondary Schools in Yogyakarta. The researchers had set up three main characteristics for selecting the participants. First, the participants have done their undergraduate study. Second, the teachers have been teaching for minimum three years. Third, the teachers were English language teachers at Secondary Schools in Yogyakarta. Furthermore, the researchers used some tools in this study such as mobile phone, pen, and notebook in order to ease on gathering the data.

In data collection procedure, the researchers carried out some steps in collecting the data. First, the researchers made the interview guidelines which used to conduct the interview. The next step was recruiting the participants to join this study. The researchers contacted the participants via WhatsApp and explained a little bit about the reason why the researchers wanted them to be the participants of this study and explained the aim of this study. After the participants agreed to join this study, the researchers and participants set up an interview schedule. After agreeing the schedule, then the researchers conducted the interview based on the agreed schedule. The interview was conducted using Indonesian language to ease both the researchers and interviewee on delivering the arguments. After collecting the data, the next step was analyzing the data. Some steps employed to analyze the results of the interview in this study. The steps were transcribing the data, member checking, and coding. Trustworthiness is maintained by using member checking in which the transcription was given to the four participants, and the result is there was no mistakes nor changes in the transcription.

4. Findings and Discussion

There were two findings and discussions reported in this study. The first is the opportunities experienced by the English language teachers at Secondary Schools in Yogyakarta in conducting TPD during the COVID-19 pandemic. The second is the challenges experienced by the English language teachers at Secondary Schools in Yogyakarta in conducting TPD during the COVID-19 pandemic.

4.1. Teachers' opportunities in conducting TPD during the COVID-19 pandemic

1) Mastering the technology

The first participant said that her knowledge about some applications and webs that can be used in the situation of COVID-19 pandemic was improved after conducting TPD activities during the COVID-19 pandemic. Ida said "Yesterday, my friends and I attended a training event on the use of *learning.id* account which was held at this school. There we were taught how to use *learning.id* account that had been provided by the Ministry of Education and Culture". Ida also added "it improved the ability of teachers to use the internet". Lili added "Now I know how to join a zoom meeting". Ifah also added her opinion that she has joined a workshop on IT as her activity on TPD during this COVID-19 pandemic, "Then the last is the Digital Learning 4.0 Learning Workshop in English learning, if this one is more IT-based learning, there is explained about the use of various applications that have been provided for free and we can use such as game media such as Kahoot, then there is google classroom, then game-based applications that can be used for learning. The statements above in line with

Almazova et al. (2020) who asserted that many scholars noted the positive impact of the electronic educational environment on improving the quality of the educational process.

2) Improving competency in designing online classes

Teachers'understanding of how to make learning videos is one of the improvements as well as one of the skills that are needed for distance learning. Two participants of this study demonstrated that their ability on making learning videos was improved afterjoining some trainings and webinars. Tika stated "I can learn to make videos for students' learning during the training". Following Tika's statements, Lili added "I know how to make learning's videos after joining a training and webinar". Ida implemented that she had joined some workshop to remain the teachers' professionalism on teaching in this COVID-19 pandemic situation. Besides, Tika and Lili added that their capabilities on making learning videos enhanced after joining some webinars and trainings during this COVID-19 pandemic. The advantages above here were in line with Almazova et al. (2020), they asserted that teachers in this pandemic situation should be able to organize their teachingactivities by making effective use of modern technologies, i.e., understanding pedagogical issues of organizing an online lesson, discussions during a webinar, etc.

3) Improving competency in class management skills

The findings of this study revealed that all participants agreed that their competency in online class management skills improved while they conducted TPD during this COVID-19 pandemic. Ifah mentioned, "Teachers more skilled on how to deliver materials in online learning". Then, Tika added, "teachers become more innovative and creative". Lili's argument about the benefits of conducting TPD activities during this COVID-19 pandemic that she became more skilled, creative, and innovative on delivering the material needed by the students. Besides, Tika and Ifah stated similar argument that they became more creative and skilled on delivering the materials of lesson. Ida also added that she used some fun activities and games to reduce the boredom of students during the online classes. All participants' statements above were in line with a study by Donitsa-Schmidta and Ramota (2020) This situation forced all teachers, including those who were hesitant and procrastinated in their decision on how to proceed with their courses, to familiarizethemselves with the various Learning Management Systems and digital platforms that are available by the school.

4) Building peer collaboration among teachers

One of the benefits of carrying out TPD activities during this pandemic is to build and strengthen ties among teachers. Lili demonstrated "Communication among teachers is smoother because all information is directly shared on WhatsApp". In addition, Lili also argued that "I asked a younger friend how to operate a computer". Both statementsshow that conducting TPD during the COVID-19 pandemic is beneficial to grow partnership among teachers and stakeholders. Besides, it improves teachers' abilityon mastering the technological knowledge. The statements above were in line witha theory stated by Donitsa-Schmidta and Ramota (2020) in their study, theydemonstrated that a period of social distancing and self-quarantine led to increasedpeer collaboration, shared learning, and mutual aid between teachers and training schools.

After showing the findings of the opportunities experienced by the Englishlanguage teachers at Secondary Schools in Yogyakarta in conducting TPD during the COVID-19 pandemic, the researchers in this study will describe some findings dealing with the challenges experienced by the English language teachers at Secondary Schools in Yogyakarta in conducting TPD during the COVID-19 pandemic.

4.2. Teachers' challenges in conducting TPD during the COVID-19 pandemic.

1) Teachers' lack of digital competency

The result of the interview showedthat the lack of digital technology is one of the challenges discovered by English language teachers in conducting TPD during the COVID-19 pandemic. Most of theteachers who experienced this difficulty are senior teachers over 40 years old. Two participants stated their agreement as below. Ida asserted "Senior teachers have difficulty in using the devices". Ida's statement shows the fact that senior teachers who are over 40 years old have low literacy in technology, so they find it very difficult when there are regulations that teaching and learning activities are carriedout online. Ida's opinion was corroborated by the opinion of one of the senior teachers who was a participant in this study, Lili stated "I'm still learning about IT".The problem was in line with a

study conducted by Nambiar (2020), she said that some teachers even felt that their lack of computer skills came in the way of using the online teaching platform effectively.

2) Unstable internet network

The next finding of the challenges experiencedby English language teachers at Secondary Schools in conducting TPD during the COVID-19 pandemic is poor connectivity. Ida argued "The problem I got was aboutthe network being less stable". Ida also add the negative impact she got because ofthe less stable network, she said "When the training was held online and my network was not stable, I could be left behind, and I didn't know when I was left behind that there were important points that I didn't get from the training". Ifah added "Then the next problem when the activities of TPD is held online, sometimeswe found that our quota is not sufficient or the signal at school does not support it". Tika also has the same argument, she stated "the signal is not stable". Besides, Tika and Lili also added that unstable internet network was being a challenge while theyconducted some trainings, webinars, or seminars. All statements above here were in line with Nambiar (2020) who demonstrated that technical issues like poor connectivity, power cuts, broadband issue, poor audio, and video quality as the main issue. Furthermore, an important fact behind this problem is that the two schools where the researchers did this study were located far from the city center orwere in the village, so the problems experienced by the four participants were quitesimilar. This issue usually comes from the teachers that live far away from the city.

3) Limited number of TPD activities

The participant declared that thefrequency of implementation of several TPD activities has decreased since the COVID-19 pandemic. Ifah said, "MGMP activities that were previously carried outroutinely are now very rarely carried out". Despite the decreasing frequency of TPDactivities, the implementation time and the number of activity participants are alsoreduced to prevent the spread of the virus. Ifah added "there is also a time limit when we do a training in a room, there is only a maximum of two hours allowed". Tika argued that not all teachers get the same opportunities in terms of their professional development activities, she said "Usually, those who take part in international seminars are only representatives, for example, the MGMPmanagement, if we are ordinary teachers, at most we can only join seminars or workshops among the city of Yogyakarta".

4) Inadequate support equipment

The lack availability of devices owned byschools is one of the challenges for teachers who conducted TPD activities during the COVID-19 pandemic. The finding showed that the technology provided by theschools is not sufficient for teachers to be able to carry out TPD activities during the COVID-19 pandemic, and there is a gap in the availability of technology ownedby schools in villages and city centers or favorite schools. Ida argued, "Our technology definitely cannot match the technology of other schools in the city or favorite school".

5. Conclusion

Teacher professional development is one way to enhance four skills that students need to learn for further educational level (Darling-Hammond et al., 2017). In the end of 2019, Coronavirus disease (COVID-19) has recently become a very serious problem handled all over the world, especially in Indonesia. The emergence of COVID-19 has an impact on several aspects of life, especially education. However, this study focuses on the challenges and the opportunities experienced by the English language teachers at Secondary Schools in Yogyakarta which the English language teachers at the chosen schools are conducting the TPD activities during this COVID-19 pandemic. Qualitative approach was applied in this study. The data was obtained by interviewing four Secondary Schools teachers who teach English language lesson and conducting TPD activities during the COVID-19 pandemic. Thus, the findings of this study had addressed two research questions described below.

Answering the first research question, this study addressed some opportunities experienced by English language teachers of Secondary Schools in Yogyakarta during the COVID-19 pandemic. The findings showed that the opportunities experienced by the teachers involved in four opportunities. The first is mastering the technology. The implementation of TPD activities during the COVID-19 pandemic provides benefits in the field of technological knowledge for teachers. Those who felt the most positive impact were senior teachers who previously had very little knowledge about technology and the use of the internet. The second is improving the competency in designing online class.

Teachers' knowledge in designing online classes increased after participating in several TPD activities such as workshops, webinars, seminars, and training. This is showed by the increasing ability of teachers to prepare learning videos for online classes, as well as the ability of teachers to utilize sites that are useful for learning. The third is improving the competency in class management skills. Another benefit is the increasing skill of teachers in managing online classes. This is indicated by the increased creativity of teachers in choosing activities that can attract students' interest in conducting online classes, as well as educational and fun games so that students don't get bored with activities in online classes. Finally, the last finding is building peer collaboration among teachers. The results of the research also show an increase in collaboration between teachers during the implementation of TPD activities during this pandemic. This is indicated by the collaboration between young teachers and senior teachers in the learning of technological knowledge, where most senior teachers have difficulties about it.

Answering the second research question, this study revealed some challenges experienced by English language teachers of Secondary Schools in Yogyakarta in conducting TPD during the COVID-19 pandemic. The challenges were covered into four findings. The first finding is teachers' lack of digital competency. The lack of ability in the field of technology is one of the big problems for teachers, especially for senior teachers in conducting TPD activities during this covid 19 pandemic. The second is unstable internet network. The next is limited number of TPD activities. The last is inadequate support system.

To sum up the findings above, the activities of teacher professional development that conducted by teachers during the COVID-19 pandemic has raised two side point of views, thus opportunities and challenges. The most participants aspired that they experienced the challenges more than the opportunities. Nevertheless, they still try their best to keep up with the demands of the current situation.

Declarations

Author contribution	:	Eko Purwanti was responsible for the entire research project. She also led the writing of the manuscript and the collaboration with the second and the third author. Ririn Anggraini participated in the data collection and analysis, and Noor Qomaria Agustina proofread the manuscript. All of the authors approved the final manuscript.
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