



PROFESSIONAL DEVELOPMENT ACTIVITY AND TEACHERS' LEARNING EXPERIENCES IN THE MIDST OF THE COVID-19 PANDEMIC

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KEGIATAN PENGEMBANGAN PROFESI DAN PENGALAMAN BELAJAR GURU DI TENGAH PANDEMI COVID-19

ARTICLE HISTORY

Submitted:
17 April 2023
17th April 2023

Accepted:
12 Juni 2023
12th June 2023

Published:
28 Juni 2023
28th June 2023

ABSTRACT

Abstract: This paper descriptively discusses the type of professional development activities attended by teachers during the Covid-19 pandemic and what learning and experience they obtained from the activities. The data are gathered qualitatively from open-ended questionnaires. The participants involved elementary school teachers from several regions in Indonesia. The participants (N=56) described various types of professional development activities they attended during the Covid-19 pandemic, which consisted of webinars, training, seminars, workshops, teachers gathering and networking, online courses, and supervision. The teachers also state that they obtained benefits from the professional development activities they attended. It is recommended that further researchers can study various aspects of professional development activities for teachers in Indonesia, especially in the contexts of elementary school and pre-service teachers.

Keywords: professional development activity, learning during the pandemic, elementary school teacher, teachers' learning experience

Abstrak: Artikel ini secara deskriptif membahas jenis-jenis kegiatan pengembangan profesi guru yang diikuti oleh para guru selama pandemi Covid-19 serta pelajaran dan pengalaman apa saja yang mereka dapatkan dari kegiatan tersebut. Data dikumpulkan secara kualitatif dari kuesioner terbuka. Peserta melibatkan para guru sekolah dasar dari berbagai wilayah di Indonesia. Para peserta (N=56) memaparkan berbagai jenis kegiatan pengembangan profesi guru yang mereka ikuti selama pandemi Covid-19 yang meliputi webinar, pelatihan, seminar, lokakarya, pertemuan para guru, berbagai kegiatan kursus, dan supervisi. Para guru juga menyatakan bahwa mereka mendapatkan manfaat dari berbagai kegiatan pengembangan profesi guru yang mereka ikuti. Saran ditujukan kepada peneliti di masa mendatang untuk meneliti berbagai aspek kegiatan pengembangan profesi guru di Indonesia khususnya dalam konteks guru sekolah dasar dan calon guru.

Kata Kunci: kegiatan pengembangan profesi, belajar saat pandemi, guru sekolah dasar, pengalaman belajar guru

CITATION

Rahmadhina, F. F., & White, A. P., (2023). Professional Development Activity and the Teachers' Learning Experiences in the Midst of the COVID-19 Pandemic. *Primary: Jurnal Pendidikan Guru Sekolah Dasar*, 12 (3), 795-808. DOI: <http://dx.doi.org/10.33578/jpfkip.v12i3.9768>.

INTRODUCTION

The competencies of teachers and their qualities have changed as a result of massive

development in the area of education and easy access in information and technology (Ekinci & Acar, 2019). These changes have affected

the nature of the learning process. Furthermore, emergency such as the COVID-19 pandemic has changed the landscape of education with classrooms shifts from face-to-face learning to remote learning (Alghamdi & Alghamdi, 2021), and ultimately students' learning activities (Khong & Nguyen, 2022). Responding to the changes, teachers need to equip themselves with different pedagogical knowledge and skills needed for the classrooms. Creating interesting learning designs (Kirschner, 2015; Northvig et al., 2018; Bergdahl, 2022) as well as access to technology development, pedagogic, content knowledge (Koehler & Mishra, 2005) have been among the competencies that teachers need to upgrade in order to effectively participate in the teaching and learning process (Koyuncu & Düşkün, 2020). Trainings and have been conducted to support group of educators, especially related to virtual learning activities (Abdelhafez, 2021; van der Klink et al., 2017). Individually, teachers are also expected to develop their professional competencies for instance through the teachers professional development activities.

Studies have been conducted on teachers professional development especially during the COVID-19 pandemic (for instance, Kalman et al., 2022) which discussed how teachers' perceived and learned from the professional development activities during the pandemic and how teachers approached professional development. Furthermore, during the pandemic, teachers also need to equip themselves with technologies to assist learning and to ensure a smooth learning process when COVID-19 spreads across the globe (Azhari & Fajri, 2022). Research on professional development activities conducted during the pandemic have particularly addressed various needs and strategies dedicated to minimize learning problems during the challenging time. However, to this date, there has been a scarcity of research

which investigates the types of professional development programs that teachers take part in during the pandemic and the types of learning experiences they gain from the activities. It is therefore expected that the present research will be able to serve as a complementary reference in understanding professional development during a pandemic from the insights of elementary school teachers.

THEORETICAL SUPPORT

Teaching and learning activities in primary school during the pandemic in Indonesia

During the pandemic of COVID-19, there has been an abrupt swift in the field of education, particularly regarding the teaching and learning activities. Classes have been shifted to online platforms. Online learning, which is the practice of learning through the use of a computer network (Pramana et al., 2021) has characterized most of the classes delivered during the pandemic. In those classes, students are able to access classes remotely assisted by technology which gives them greater flexibility in their learning schedules (Nuraini et al., 2020; Yulianti & Mukminin, 2021). Furthermore, distance learning is mandated to carry out the learning process at home in order to give students actual learning chances (Ministry of Education and Culture, 2020).

Under the supervision of their parents, students participate in online or distance learning (Mahmud et al., 2021). Thus according to Mahmud and colleagues, an alternative that may be employed to improve knowledge and skills not only during online learning but for the entire learning process is the existence of cooperation between teachers and parents in understanding student learning (2021). This is carried out due to a number of difficulties encountered during online learning, including the issues with internet connections and the availability of technology to support

the learning process. Teachers are particularly encouraged to develop their expertises in applying technology in the teaching and learning activities. To ensure that the teaching and learning process run smoothly during the pandemic, classes need to be well-equipped by technology to assist learning. In addition to facilitating the learning process, researchers suggest that students are more likely to be motivated to learn when technology are available to support their learning (Febrialismanto, 2020; Elihami, 2021).

Exploring professional development for teachers

Researchers have been interested in exploring professional development for teachers for decades as an important effort to improve teachers' quality. According to Kennedy (1998), research on professional development has initially been conducted to discuss the form and structure of the activities, and whether the programs include consultation/coaching or entirely outside of the classroom. More studies related to the essence of the professional development activities have also been conducted to explore what teachers actually learn and how the programs effectively influence teachers' beliefs and practices (Cohen & Hill, 2000; Garet, Porter, Desimone, Birman, & Yoon, 2001).

Teachers have absolutely been the most essential resource for professional development activities (Desimone, 2009) as they can bring different and unique best practices to be shared with others. An active and effective professional development program will be able to improve the knowledge, skills, and beliefs of teachers, as well as to enhance students' learning (Jill & Sobari, 2016). In order to develop teachers' professional qualities, they need to go through a series of changes and learning process that are aimed at developing their competencies and skills. Guskey (2009) suggests that the

improvement efforts within the field of education need to be planned well to ensure successful outcomes. In the same vein, Ferreira (2015) argues that proper execution in professional development activities is needed so it will be effective and is able to enhance teachers' knowledge and skills.

In order to be effective, professional development programs need to be described as structured professional learning which result in changes in teacher practices and improvements in student learning activities (Darling-Hammond et al., 2017). The researchers also argue that effective professional development programs need to include the following features: (1) focussing on the content, (2) incorporating active learning, (3) supporting collaboration (4) using models of effective practices, (5) providing coaching and expert supports, (6) providing feedback and reflection, and (7) having sustained duration. Moreover, according to the Organization for Economic Cooperation and Development (OECD), professional development activities for teachers are described as in service education, teachers training practicum, in service training, and upgrading programs (2005).

The types of professional development for teachers in Indonesia

Since the 1970s, professional development activities have been a component of educational practices in Indonesia (Maureen et al., 2021). Likewise, school reform and teaching and learning activities are positively impacted by professional development and teacher effectiveness (Asiyah et al., 2021). Regarding the practice of professional development, it needs to be conducted with a balance of the essential components and structure in order to function effectively (Pantic & Cain, 2022). Additionally, with a long process of change in teacher knowledge and abilities linked to experience participating

in professional development activities, this practice will also have a significant impact on the quality of effective teaching and learning. In line with what has been stated by the OECD, the commonly used terms for teachers professional development in Indonesia are teacher training, In-Service Education and Training (INSET), in-service learning, staff development, Continuing Professional Development (CPD), staff development, professional development, continuing education, professional learning and life-long learning (Rahman, 2014). Furthermore, professional development for teachers in Indonesia have been conducted based on three demands: (1) focussing on pedagogic, personality, and social competency, (2) implementing current curriculum, and (3) producing graduates with the 21st century skills (Lisnawati, 2019).

Professional development activities have been facilitated by organization for teachers in Indonesia, including the PKG (*Pusat Kegiatan Guru* or center for activities for teachers), KKG (*Kelompok Kerja Guru* or working groups for teachers), and MGMP (*Musyawarah Guru Mata Pelajaran* or forum for content-subject teachers). Those programs allow teachers to share their experiences in solving problems they face in teaching and learning activities and to improve teacher professionalism (Supriadi, 1998; Tanang & Abu, 2014). Moreover, the elements of teachers' professional development typically come in three different sorts. *Firstly*, there are two different kinds of activities that make up self-development: functional training (for example an activity previously introduced by Pujiastuti et al., 2021; Mahmud et al., 2021) and teacher collective activities. *Secondly*, scientific publications include articles in the field of education, popular scientific writings, research papers, scientific review papers in the field of formal education and learning, and presentations of research findings or scientific

ideas on scientific forums. *Finally*, inventive works that include inventing new technologies, discovering or creating works of art, creating or changing teaching/display/practicum tools, and creating standards, guidelines, questions, or other similar things at the national or provincial level (Nurmalina, 2021).

Professional Development for Teachers during the COVID Pandemic

Nearly every aspect of education around the world has been impacted by the Covid-19 pandemic. Alongside the classes that have been transitioned into remote or distance learning, teachers' professional development programs have also relatively undergone similar changes. In Sweden, professional development activities were designed using the Blended Learning Adoption framework to prepare teachers for online learning (Bergdahl, 2022). Remote learning has also been challenging for both students and teachers in Indonesia (Almanthari et al., 2020; Supriyanto et al., 2020), which has simultaneously raised the demand for training. As a result, teachers are honing their online teaching techniques.

Among the important skills that teachers need to have to facilitate their teaching and learning activities during the pandemic is related to information and technology skills. Even prior to the pandemic, researchers have discussed teachers' knowledge on information and technology. A study by Widodo and Riandi, which Koh et al. for instance, intensively discussed, showed teachers' Information Communication and Technology (ICT) proficiency in Indonesia was unevenly distributed across the country (2018). But 21st-century changes are already to the point where ICT use is expanding in a number of areas. As a result, educators must increase their professional expertise in ICT integration as well as their knowledge of

technical pedagogical material (Hwee et al., 2018; Hermanto, 2020).

METHOD

Setting and participants

This study was conducted using a convenience sampling method to recruit participants from both public and private elementary schools in West Java and Jakarta areas. A total of 56 (N=56) teachers participated in the study. The participants were recruited from different institutions directly through emails and *WhatsApp* message communication through representatives from those schools. The researchers also obtained permissions from the relevant authorities at those schools and had opportunities to explain the objectives of the present study through emails. After the main aim of the study was explained to the participants, confidentiality was assured and participation was described as voluntary, the participants were asked to sign a consent form indicating their agreement to participate and concurring that their results may be used for research and future possible publication purposes. All the participants were willing to participate and signed the documents.

Data collection instrument

The data collection instrument was a questionnaire consisting of two main sections; demographic information and professional development activity. The demographic information section consisted of five items: email address, occupation/position, gender, status of institution, and residential information. The professional development activity section consisted of five items which were all open-ended, asking the participants to provide answers to:

- (1) the type of professional development programs attended
- (2) the benefits of professional development

programs attended

- (3) implementation plan from the professional development activities
- (4) most preferred professional development activities
- (5) recommendation for future professional development activities

Participants were invited to respond in *Bahasa Indonesia*, so that they would be able to better comprehend the questions and feel more comfortable when responding to the items. Questionnaires were shared to the participants using Google forms. The participants spent approximately fifteen to twenty minutes to complete the questionnaires

Data analysis

For the initial step, after some statements written in *Bahasa Indonesia* were translated into English, all the statements were listed to facilitate exploration of salient common themes. There were 87 statements related to the types of professional development attended by the participants and 107 about the types of learning experiences that the teachers had from the professional development activities they attended.

In the second step of the analysis, the authors negotiated the themes that emerged from the list and agreed that there were seven themes to describe the types of professional development activities attended by teachers. As the themes and concepts were quite clearly defined, it was not difficult to achieve a total agreement between the coders (100% inter-rater reliability). The concepts that described the types of professional development were as follows:

- (1) Webinar on inclusive education and online learning
- (2) Training on *kampus mengajar* program, multimedia, and professional competence
- (3) Seminar on *merdeka belajar* curriculum and learning media

- (4) Workshop on digital learning
- (5) Teachers professional gathering and networking
- (6) Massive Open Online Courses (MOOC)
- (7) Supervision

With regards to the types of learning experiences, the authors identified the following eight concepts:

- (1) Obtaining professional knowledge
- (2) Developing teaching competence
- (3) Maintaining pedagogical competence
- (4) Expanding networks
- (5) Developing technical skills
- (6) Increasing motivation and productivity
- (7) Developing technological skills
- (8) Developing creativity and innovation related to teaching, learning, and research

Compared to the previous list of themes which were clearly defined, the themes and concepts regarding the types of learning experiences were more widely distributed around the central concepts. The first author initially identified twenty themes to describe the types of learning experience from the professional development activities. By

negotiation between the authors, the set was reduced into the eight concepts, representing a 75% level of inter-rater reliability.

RESULTS AND DISCUSSION

According to the analysis of the qualitative data, seven main concepts were explored related to the types of professional development attended by teachers, while another eight themes emerged for the types of learning experiences that the teachers have from the professional activities (numbered in brackets below). To ensure the original voices, where possible, even though being translated in English, teachers' explanations and comments are provided verbatim, including occasional infelicities.

Types of professional development attended by teachers

Based on the questionnaires, the type of professional development attended by teachers during the pandemic is presented in Figure 1.

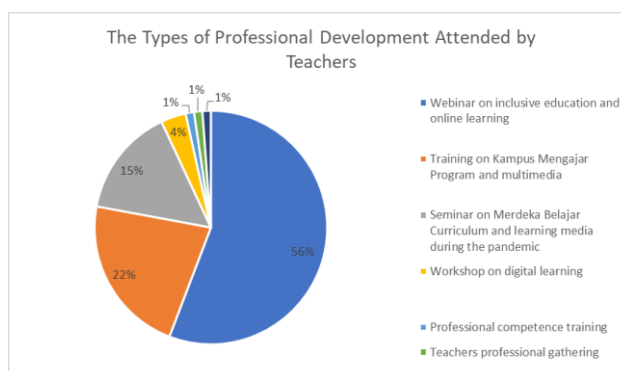


Figure 1. The Types of Professional Development Attended by Teachers

As seen in the above chart, webinar became the most popular professional development activity attended by teachers with a total 56% attendees, followed by training with a total 22% attendees and seminar with a total of 15% attendees. Teachers' (represented

by "R" = respondent) complete explanations on types of professional development that they attended during the pandemic were consolidated around eight main categories as given in the following brackets:

(1) Webinar: during a pandemic, the participants explained that webinar had the highest flexibility as it allowed them to participate in the events easily regardless of the locations. The participants also specifically mentioned that they learned a wide array of knowledge during the webinars.

I attended several webinars for elementary school math teachers, teaching science for young learners and the benefits of storytelling in teaching and literacy for children at the elementary school (R47)

Inclusive education webinar and micro-teaching webinar (R13)

(2) Training on *Kampus Mengajar* Program and multimedia: during a pandemic, this training was entrusted to help teachers upskill themselves to facilitate students in learning under the *Kampus Merdeka* platforms especially related to the multimedia application in teaching and learning activities. Professional competence training became an option for teachers to develop their pedagogical competence during pandemic.

Training on kampus mengajar batch II (R1)

Teacher's training from Pearsons (R29)

An activity for professional development that I took part in during the pandemic was the PPG (R2)

(3) Seminar on *Merdeka Belajar* Curriculum and learning media during the pandemic: this activity is believed to be an opportunity for teachers to improve their understanding by sharing experiences with others in a forum and discussing relevant issues related to curriculum and learning media.

Seminars on how to teach and deliver material during the pandemic, then regarding the platform to support learning in the digital era (R30)

Learning about the psychology of children, methods for teaching young learners,

classroom management, and preparation before teaching (R9)

(4) Workshop on digital learning: during the pandemic, this activity provided a place for teachers to discuss some practical skills and it gave the opportunity to apply new experiences especially related to using technology for teaching and learning activities.

I Participated in the Paideia Class Activities (Ping Guru) "Become a reliable digital teacher" (R9)

(5) Teachers professional gathering: this activity is believed to be an opportunity at the cluster or sub-district level where teachers from schools within the related cluster can exchange information, insights, as well as their skills and interests in the field of education.

KKG is one of the types of professional development activities that I participated in during the pandemic (R49)

(6) MOOC: this activity is also an option for teachers in developing their professionalism.

One type of several professional development activity that I took part in during the pandemic, was the MOOC (R56)

(7) Supervision: this activity allows teachers to mentor one another and to enrich their pedagogical knowledge.

Supervision is one of the types of professional development activities I attended during the pandemic (R36)

The types of learning experiences

Based on the survey, the teachers' learning experience during the pandemic was identified. As depicted in the chart below, most teachers (31%) reported that they obtained professional knowledge from the professional development they attended. The teachers also admitted that they obtained the following experiences: developing teaching competence, maintaining pedagogical competence, and expanding networks:

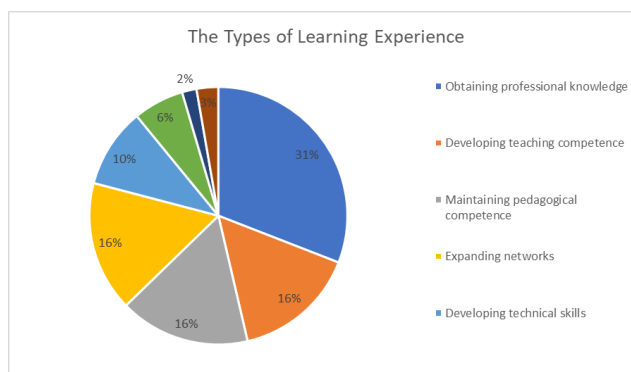


Figure 2. The Types of Learning Experiences

In a similar vein, the analysis of the types of learning experiences of teachers from attending the professional development activities were in line with the types of professional development activities. What the teachers reported about the professional development they attended was relatively consistent with the learning experiences they obtained. Teachers' explanations on learning experiences were consolidated around eight main categories as given in the following brackets:

(1) Obtaining professional knowledge: teachers believed that the professional development activities they attended were their opportunity for developing their professional competencies for their future career advancement.

Improving teachers ability to carry out teaching duties and to be competent teachers so we will have better career opportunities in the future (R10)

Improve academic knowledge and broaden our way of thinking (R12)

(2) Developing teaching competence: teachers believed that the professional development activities they attended enriched their teaching competence and to learn new concepts to be applied to their teaching and learning activities.

The benefit is providing knowledge about how to teach children according to their age level and to be good professional teacher (R9)

Support teachers' professional development regarding of their level of competencies (R15)

(3) Maintaining pedagogical competence: teachers believed that the professional development activities they attended were able to help them develop their pedagogical capabilities.

Provides a deeper understanding of the topics presented related to international curriculum studies and educational concepts worldwide (R7)

Improving the professional and pedagogical abilities of teacher (R36)

The benefits of professional development activities that have been followed can improve skills in interesting teaching techniques (R55)

(4) Expanding networks: teachers believed that the professional development activities they attended granted them opportunities to connect with other teachers and those who work in the field of education.

Strengthening the network and connections with other teachers (R 48)

I have the opportunity to network with fellow teachers (R 39)

(5) Developing technical skills: teachers admitted that during the pandemic they needed to learn and relearn new knowledge in order to be able to accommodate

the teaching and learning activities delivered in different platforms. This is particularly related to learning various teaching techniques that can accommodate students most during the pandemic.

Learning a variety of strategies and learning methods and to improve my technical skills (R39)

I could develop my knowledge in teaching and learning related to technical matters needed during the pandemic (R44)

(6) Increasing motivation and productivity: teachers claimed that the professional development activities they attended became a productivity racetrack that motivated them to develop their potential.

I can develop awareness of my own abilities (R49)

Increasing productivity by continuing to learn new things (R17)

(7) Developing technological skills: especially during the pandemic, teachers suggested that the professional development activities they attended increased their understanding of the application of technology in teaching and learning activities to accommodate the needs of the students.

It gave new insights about best practices and teaching methods especially in digital learning platforms (R33)

Providing knowledge about creating learning videos, making online assessments and technologies applied for classrooms (R9)

(8) Developing creativity and innovation related to teaching, learning, and research: teachers noted that the professional development activities they attended increased their creativity and innovation related to teaching and learning and strengthened their involvement in research practices.

I learned a lot especially related to developing effective learning media (R18)

The professional development activities I attended provided ideas for improving my teaching methods (R28)

DISCUSSION

Types of professional development programs attended by teachers during the pandemic

Teachers learn new knowledge related to the various and substantial changes in teaching during the pandemic through different platforms of teachers professional development. Teachers should be concerned about the changes because different experiences in classroom activities could present challenges in addition to opportunities for learning (Almanthari et al., 2020; Supriyanto et al., 2020). Studies have reported that there have particularly been greater needs for training or professional development activities to help teachers during the pandemic.

The present study investigates the types of professional development activities and learning experiences of teachers during the pandemic. Based on the results presented earlier, online platforms programs ranging from webinar, workshop, training, seminar, teachers gathering, and remote supervision have become the preferred professional development activities attended by teachers during the pandemic. Similarly, previous studies have also reported that web-based seminars, in which participants can present in real time from a variety of locations using a shared virtual platforms (Nugraha & Maulida, 2021), such as *Zoom*, *Google Meet*, *Adobe Connect*, or *Cisco WebEx*, and engage in synchronous real-time communication using voice over IP and web camera technology that are accessible regardless of the locations (Gegenfurtner & Ebner, 2019).

It is well known in this regard that the kinds of professional development program in which the majority of teachers took part during the pandemic fall under the category of self-development activities, which is itself divided into two types of activities: participating in functional training and participating in teacher collective activities (Nurmalina, 2021). Based

on how the professional development activities are conducted, typically, the development program is supported by the schools or district where schools are located. In line with the OECD suggestion, this particularly a call for the districts or institutions to help facilitate the teachers in their professional development (Darling-Hammond et al., 2017). Based on types of activities conducted, the types of activities attended by teachers in this study, some of them are considered effective in improving their skills and knowledge as they are (Darling-Hammond et al., 2017) as they support collaboration among teachers, incorporating models of effective practices in utilizing technology in the classroom, and providing coaching and expert support during the professional-pedagogical training.

For the present study, the professional development programs are also supported by several higher education institutions through the community service programs for faculty members (Mahmud et al., 2021). Furthermore, teachers who require specialized professional development that is not covered by the school's or district's plan can also pursue this self-quality development, in which case the webinar is the best option for them during the pandemic.

The learning experiences from professional development activities

Pandemic has brought abrupt changes in the classrooms worldwide. Teaching and learning activities are shifted from face-to-face interaction to online platforms. These changes are without warnings and there are no guidelines on how to cope with the new situations. As a consequence, students need to learn new strategies to be able to participate in the teaching and learning process. Likewise, in order to accommodate the needs of the students, teachers are expected to equip themselves with new knowledge and skills.

Improvements in knowledge and abilities in the area of teaching have been

described by Rahman (2014) as changes and constant learning that go towards development of a teacher. Teachers who were participants of this present study admitted that they had a lot of takeaways from the professional development activities during pandemic ranging from obtaining professional knowledge, developing teaching competence, maintaining pedagogical competence, expanding networks, developing technical skills, increasing motivation and productivity, developing technological skills, and developing creativity and innovation related to teaching, learning, and research. Some of these findings conform with Tafazoli (2021) who points out that teachers' learning experiences during the professional development activities during the pandemic can be divided into six categories ranging from technological knowledge, pedagogical knowledge, content knowledge, technological pedagogical knowledge, technological content knowledge, and pedagogical content knowledge.

Additionally, the most notable learning experience is related to improving teachers' digital and technological knowledge. This finding expands a study conducted by Schultz & Love (2022) who claim that teachers need to strengthen their technological skills by learning digital tools and also creating digital materials. As such, teachers need to advance their technological pedagogical content knowledge and their professional know-how for the information, communication, and technology integration.

Finally the learning experience is a benchmark for teachers regarding their own quality and is a material for assessing needs and improvements that must be made in the future (Hwee et al., 2018; Hermanto, 2020). Because the main goal of using this technology is to increase learning motivation, these activities can also have an impact on teacher motivation to create and innovate facilitated by

the professional development programs during the pandemic.

CONCLUSIONS AND RECOMMENDATIONS

Professional development for teachers is deemed important, as this facilitates teachers and allows them to develop skills and knowledge needed during the challenging time. The pandemic has significantly created different experiences for teachers. These different experiences called for opportunities for teachers to equip themselves with skills and knowledge in order for them to be able to accommodate the needs during the pandemic. Based on the results of the present study, teachers have no particular barriers to develop themselves professionally during the pandemic. They continue to seek opportunities which can enrich them personally, professionally, and academically. Based on the main findings of the present study, we propose the following implications:

First, teachers admitted that all of the professional development activities they attended during the pandemic were conducted online. This implies that the face-to-face restrictions during the pandemic have been a blessing in disguise as it creates convenient remote platforms for professional development. This platform has allowed teachers to communicate and work together regardless of the distance. Nugraha and Maulida (2021) also previously reported that workshops or online courses are considered to be the most helpful platforms for professional development during the pandemic.

Furthermore, the types of professional development activities attended by teachers are relatively spread around webinars, workshops, seminars, training, networking, online courses, and supervision. During the professional development activities, teachers also experience a series of changes and learning processes (Ekinci & Acar, 2019) not only

related to developing their pedagogical and professional knowledge, but also getting to know the best practices in the field and personal improvements through networking activities with other educators. Through the professional development programs, the demands in professional knowledge and pedagogical skills are met. Teachers also practice self improvement activities through their involvement in creating innovative tasks guided by mentors or experts, and even scientific publications with their fellow teachers (Febrialismanto, 2020; Elihami, 2021).

Second, as for the learning experience, according to the teachers' statements from the present study, developing pedagogical competence, maintaining personal wellbeing, and increasing scholarly involvement were among the lessons learned during the professional development activities they attended during the pandemic.

Recommendations

Based on the findings of this study, it is advised that educational researchers keep looking into many facets of professional development activities available especially in the context of elementary teachers. Future research focussing on challenges and opportunities for professional development would also be very beneficial. In order to achieve more generalizable results, future research may consider involving larger samples and involve teachers from a wider area in the country.

ACKNOWLEDGMENT

The researchers are grateful to the Elementary Teacher Education Study Program, President University for facilitating this project financially through the Community Service Project for faculty members.

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