



The Impact of COVID-19 on Pre-Service Teachers' Teaching Practice

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ARTICLE INFO	ABSTRACT
Article history Received: March 03, 2022 Accepted: July 08, 2022 Published: July 31, 2022 Volume: 10 Issue: 3 Conflicts of interest: None Funding: None Disclosure statement: No potential conflict of interest was reported by the authors.	Teaching practice, which has a significant impact on the professional development of pre-service teachers, has been greatly affected by the COVID-19 pandemic. During the pandemic process, pre-service teachers have conducted teaching practice through distance education. The aim of this study is to determine whether the pre-service teachers have acquired the learning outcomes determined within the framework of the objectives of the teaching practice with distance education, which is a new format for teaching practice. To collect data, we used an open-ended questionnaires formatted on a Google-form responded by 246 pre-service teachers. The results of the study show that most of pre-service teachers could not acquire the learning outcomes determined within the framework of the objectives of teaching practice through distance education. Pre-service teachers attribute this to the lack of actual classroom environment and lack of communication and interaction with students. The findings of the study also indicate that teaching practice through distance education enabled pre-service teachers to gain knowledge about distance education tools and experience on how to use them.
	Key words: Covid-19, Pre-Service teacher, Teaching practice, Distance education

INTRODUCTION

COVID-19, which emerged in the last months 2019 and spread rapidly all over the world, turned into a pandemic after a short time (WHO, 2020). The pandemic, which affects all areas of life from health to transportation and from economy to tourism, has caused people to have hard times. Universities are one of the places where the COVID-19 pandemic has made its impact felt. Many universities continue their educational activities through distance education in this process. This situation, which is a new experience for many faculty members and students, creates various conditions. One of the most important of these conditions is that the lessons that require practice are carried out through distance education. The teaching practice course taken by pre-service teachers studying at education faculties is one of these courses.

Perry and Smart (1997) define teaching practice as a period in which pre-service teachers attain first-hand experience by working in a teaching-learning environment. Pre-service teachers get their first professional experience during this period and they develop an attitude towards teacher's activity, rights, obligations, and responsibilities (Rauduvaité et al., 2014). Teachers usually claim that teaching practice is the most valuable component of their preservice programs (Valencia et al., 2009), and similarly, pre-service teachers consider it as the most important aspect of their educational programmes (Poulou, 2007). Pre-service teachers have the opportunity of both observing an experienced teacher and learning from his/her practices during school-based teaching practice (Jao et al., 2020).

In teaching practice, pre-service teachers not only observe teacher practices in a real classroom environment, but also observe their own practices are observed and assessed (Choy et al., 2014). The expression "learning to practice in practice", stated by Darling-Hammound (2010, p. 40), constitutes the basic logic of teaching practice. On the other hand, "expert guidance" (p.40) points out the importance of the process of evaluating the practices of pre-service teachers by experienced teachers and counsellors from the university and giving them feedback. According to Moody (2009), pre-service teachers think that constructive feedback from in-service teachers is very important, and most of them are pleased with the feedback they received. Supervisor, as a facilitator and source of technical and emotional support, plays a significant role for pre-service teachers during teaching practice (Caires et al., 2012).

Several studies have been conducted dealing with teaching practice from different perspectives. Debreli (2012) focused on the change of pre-service teachers' beliefs about teaching and learning English during and after the teacher-training program (teaching practice) in his study. The findings of the study showed that "they developed an awareness of the applicability of the theoretical issues that they already knew, and they developed and modified their beliefs according to the personal teaching experiences they

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had within the training program" (p. 372). Smith and Lev-Ari (2005) aimed to determine the value that students attribute to teaching practice in their research. The researchers concluded that teaching practice is highly valued by most of the pre-service teachers. Brown et al. (2015), in their study, investigated the impact of teaching practice on pre-service teachers' sense of teaching efficacy and feelings of preparedness. The findings of the study showed that after teaching practice pre-service teachers have an increased sense of preparedness and self-efficacy. In another study, Martins et al. (2015) stated that the experiences that pre-service teachers gained through their teaching practice contributed to the development of their self-efficacy. Kabilan (2013) examined pre-service teachers' experience of professional development during an international teaching practice and concluded that pre-service teachers had useful and meaningful experiences.

Gower et al. (2005, pp. 1-2) listed the objectives of teaching practice as follows:

- To allow pre-service teachers to simulate or approach the real teaching situation under sympathetic supervision;
- To provide pre-service teachers with an opportunity to try out techniques and to have their teaching evaluated and constructively criticized;
- To provide pre-service teachers with exposure to real learners, their learning problems and the factors which influence their learning;
- To provide an arena for assessment;
- To provide an opportunity for pre-service teachers to get used to being observed;
- To encourage development of criteria for self-evaluation and self-awareness;
- To create a situation of gradually increased freedom;
- To help pre-service teachers develop their own teaching style;
- To expose pre-service teachers to students at a range of levels and to develop an understanding of the differences of approach required; and
- To develop pre-service teachers' sense of responsibility for their students.

The Turkish Council of Higher Education (YÖK, 2021)

has determined the following objectives for teaching practice in the course contents prepared for teaching undergraduate programs:

- Making observations on teaching methods and techniques specific to the field;
- Making micro-teaching practices using special teaching methods and techniques specific to the field;
- Planning lessons independently;
- developing activities and materials related to the lesson; and
- Preparing teaching environments, managing the classroom, assessing, evaluating and reflecting.

Pre-service teachers take the teaching practice course as *Teaching Practice I* and *Teaching Practice II* in the last two semesters of their four-year education. The course contents of these two courses contain the same objectives as stated above and these objectives constitute a general framework for the courses.

Before the pandemic, the teaching practice offered pre-service teachers the opportunity to go to public schools one day a week in the presence of a supervisor from university, observe lessons related to their own fields, and practice. During the pandemic period, pre-service teachers attended the lessons taught with distance education tools such as Google classroom and Zoom meeting one day a week. They made observations, and practice with these tools in teaching practice. YÖK did not make any changes in the content and objectives of teaching practice during the pandemic period. The practices of pre-service teachers in teaching practice were assessed and evaluated by their supervisor and the teacher at the school as before the pandemic.

The aim of this study is to investigate whether pre-service teachers doing teaching practice during the pandemic period have achieved the learning outcomes determined within the scope of the main objectives of teaching practice. Therefore, the research question has been formed as follows:

• Have pre-service teachers achieved the learning outcomes determined within the scope of the main objectives of teaching practice in their teaching practice during the pandemic period?

METHOD

This is a case study. Case studies can be conducted with a qualitative or quantitative approach and the aim is to reveal results related to a particular case. In qualitative case studies, one or more than one cases are investigated in depth. That is, factors related to a case (environment, individuals, events, processes, etc.) are investigated with a holistic approach and focus is on how they affect the case and how they are affected by the case (Yıldırım & Şimşek, 2005, p. 73). The design of the study is intrinsic case study. In intrinsic case studies researchers investigate unusual or unique individuals, groups or events (McMillan & Schumacher, 2014, p. 371).

Participants

The participants of the study are 246 pre-service teachers studying at five different universities in Turkey. These randomly selected participants are fourth grade students of education faculties and if they manage to graduate, they will be able to work as teachers in public and private schools in the next academic year.

Data Collection

An open-ended questionnaire asked pre-service teachers to reflect on their ideas about the teaching practice that had been conducted by them via distance education during the pandemic period. The open-ended questionnaire, which was formatted on a Google-form, contained ten questions. While determining the questions in the questionnaire, first the relevant literature was examined and then eighteen questions were created within the framework of the main objectives of teaching practice. These questions were evaluated by three faculty members who had previously mentored pre-service teachers in their teaching practice. In the light of the suggestions of these faculty members, some questions were eliminated and some questions were changed, and finally, a ten-question questionnaire was obtained. In the first nine questions, respondents are given three options (Yes, No, Partially) to mark and a space where they can explain why they marked the option they preferred. The last question is an open-ended question and focuses on pre-service teachers' general thoughts about teaching practice has been conducted via distance education. This data collection method was preferred due to pandemic conditions and this questionnaire was sent to teacher candidates via WhatsApp and E-mail. The open-ended questionnaire was started to be sent to the participants on 25.03.2021 and it was sent to 355 pre-service teachers in total. The questionnaire was completed by 246 participants and the data analysis started on 01.05.2021.

Data Analysis

Qualitative research approach was applied in this study, and the data were analyzed with the descriptive analysis method. Direct quotations are frequently used for revealing participants' thoughts clearly in this method, and interpretations are made on them. The aim of such an analysis is to present findings in an organized and interpreted way. For this purpose, the data were described in a logical and understandable way. Then, these descriptions were commentated, cause-effect relationships were examined and some conclusions were reached (Yıldırım & Şimşek, 2005).

FINDINGS

The first question in the questionnaire is "Do you think that the teaching practice you made through distance education contributes to your professional development?" The data in Table 1 shows that almost half of the participants (f= 113, 47.1%) think that the teaching practice conducted through distance education did not contribute to their professional development.

When the explanations of the participants regarding the option they marked are examined, it is understood that those who marked the option *No* attribute this to the lack of classroom environment and lack of communication and interaction with students. The following explanations by participants summarize all other statements:

"Since we do not interact one-on-one with the students, it is not efficient." (Participant 17)

"I cannot be very active in a process carried out with the students and the teacher of the lesson in front of the screen. Like us, students have a lot of difficulties. Seeing the victimization of most of our students affects us. It can make me feel very competent as we cannot be involved in the face to face education process in the classroom." (Participant 34)

 Table 1. Contribution of teaching practice through

 distance education to professional development. (n=246)

The explanations regarding the option *Partially* indicate that pre-service teachers' expectations from teaching practice decreased in this process. This explanation sums up other statements:

"I think its contribution is half because I am not able to interact face-to-face with students in a classroom setting. Besides, I still have the opportunity to make teaching practice online. I may have not done anything about teaching practice during this period." (Participant 72)

It is understood from the explanations regarding the option *Yes*, participants think that the teaching practice carried out with distance education contributes to their learning about the use of technology and their knowledge about distance education, which they think will be widespread in the future. The following explanation includes these two issues that many participants mentioned separately:

"In my opinion, the online classrooms we attended to observe provided the opportunity to learn how to control the online lesson, what problems teachers and students faced differently from the face-to-face education environment, what they do in this situation, and how the process progressed, and these contributed to our professional development. Because, I also think that distance education will become more widespread in the coming years. Therefore, its contribution is great." (Participant 132)

The second question is: "Do you think a lesson taken through distance education provides a learning-teaching environment?" The results in Table 2 reveal that more than half of the participants [f= 139 (57%)] think that a course taken through distance education does not provide a learning-teaching environment.

When the explanations regarding the option *No* are examined it is seen that nearly all of participants mentioned the lack of teacher-student interaction. One of the participants explained this situation as follows:

"In this way, we do not know and control exactly whether the students are learning, and the efficiency of the lesson and the interaction within the lesson remain low." (Participant 175)

The explanations regarding the option *Partially* indicate that participants marked this option because of the opportunity of making observation. The following two explanations can be considered as examples:

"Although it does not offer a real learning environment, we had the opportunity to observe the teacher.

So at least we had the opportunity to observe the process." (Participant 212)

The following explanations regarding the option *Yes* show that some pre-service teachers, though few in number, think that distance education offers a teaching-learning environment:

 Table 2. Learning-teaching environment in distance education. (n=246)

	Yes	No	Partially		Yes	No	Partially
f	33	113	94	f	24	139	81
%	13.8	47	39.2	%	9.8	57	33.2

"I saw classes being taught in virtual classrooms, and I even taught in these classes. For this reason, I think that the teaching practice course we take through distance education provides a real learning-teaching environment." (Participant 9)

"Even with the computer, learning can be achieved and teacher-student relations continue. (Participant 23)

The third question is "Did teaching practice through distance education allow you to put the theoretical knowledge you received during your undergraduate education into practice?" It is understood from the results in the Table 3 that half of the participants (f= 121, 49.4%) think that the teaching practice through distance education did not enable them to put their theoretical knowledge into practice.

When the explanations regarding the option *No* are examined, it is seen that pre-service teachers attribute this result to the lack of classroom environment and technical problems they experienced. Following explanations show the general perspectives of the participants:

"This is out of the question by staying away from the classroom environment." (Participant 97)

"How we will put into practice what we have learned over the four years, through the internet connection that is cut every second?" (Participant 62)

It is understood from the explanations regarding the option *Partially* that, the participants could put a limited part of their knowledge into practice, and they think that this is insufficient. The following quotations support this finding:

"We can use some of the techniques we have learned while lecturing, but we cannot use most techniques because we are not fully interacting with students." (Participant 185)

"We are able to convey very little information that we have learned through distance education. We do not make applications. In this case, students become listeners and we become narrators." (Participant 239)

It is understood that the participants who marked the option *Yes* think that they can put their knowledge into practice with distance education. The following two explanations summarize the other explanations:

"It is an environment where I can put my theoretical knowledge into practice in a large extend." (Participant 122)

"Through online lessons I was able to teach students and put what I learned in theory into practice." (Participant 43)

The fourth question is "Do you think that teaching practice through distance education has contributed you on classroom management?" Table 4 shows the distribution of answers to this question.

When the explanations regarding the option No are examined, it is understood that participants chose this option

 Table 3. Putting the theoretical knowledge received

 during undergraduate education into practice in distance

 education. (n=246)

	Yes	No	Partially
f	33	121	91
%	13.5	49.4	37.1

because they think that distance education do not provide a classroom environment and is inadequate to control students. The following two explanations and the like provide this view:

"Neither we nor the students are in a real classroom environment, so it does not contribute to classroom management." (Participant 38)

"It is very difficult to control students in distance education." (Participant 146)

The explanations regarding the option *Partially* show that the participants think that teaching practice through distance education contributes to classroom management even a little. The following explanation covers almost all of explanations in terms of content:

"Of course, it is not like face-to-face education, but we have seen a little bit about the problems that may occur in the classroom and how they can be solved." (Participant 18)

When the explanations of the participants who marked the option *Yes* are examined, it is understood that they think that their observations contribute to them in classroom management. The following explanations can be considered as examples for this finding:

"I was able to observe teachers' classroom management skills and made inferences for myself." (Participant 205) "Since I observed how our teacher manages the students in the classroom, I learned what I should do and what I should not do." (Participant 164)

The fifth question is "Do you think that the teaching practice through distance education contributed to the preparation and implementation process of a lesson plan?" The distribution of answers to this question is seen in the Table 5.

The eye-catching point about these findings is that the rates are close to each other. When the explanations regarding this question are examined, it is seen that the explanations made for all three options are mostly similar. From the explanations for all three options, it is understood that the participants did not have any problems in preparing the lesson plan, but they mention that there are problems during the implementation phase. Similar explanations for different options are as follows:

"There is no problem in preparing a lesson plan, but the subject of implementation remains incomplete." (Yes) (Participant 78)

Table 4. Contribution of teaching practice through distance education to classroom management. (n=246)

	Yes	No	Partially
f	49	117	78
%	20.1	48	32

Table 5. Contribution of teaching practice through distance education to the preparation and implementation process of a lesson plan. (n=246)

	Yes	No	Partially
f	82	70	91
%	33.7	28.8	37.4

"Lesson plan is being prepared, but implementation is a problem." (No) (Participant 196)

"We were able to prepare a plan with the information we got from the textbooks, but we could not implement it as we wanted." (Partially) (Participant 3)

The sixth question is "Does the teaching practice through distance education provide you with an opportunity to use the teaching methods related to your field?" Table 6 shows the distribution of answers to this question.

When the explanations about the options are examined, it is understood that the participants who chose the option *No* attributed their inability to use the teaching methods related to their fields due to the fact that distance education do not provide a real classroom environment. The following explanation can be considered as a summary for the explanations on this option:

"Since there is no classroom environment, we cannot apply what we know." (Participant 111)

When the explanations regarding the option *Partially* are examined, it is seen that the participants mentioned that they can only use the direct instruction method and that this is insufficient. The explanation that fully explains this situation is as follows:

"Unfortunately, we can only use the direct instruction method; it is not possible for us to apply most of the methods we have learned." (Participant 41)

It is understood from the explanations of the participants who marked the option *Yes*, even if their number is few, that distance education provides an opportunity to use teaching methods. The following explanation can be given as an example:

"I learned that I can use different methods with distance education." (Participant 129)

The seventh question is "Does the teaching practice through distance education enable you to observe a learning-teaching environment?" Table 7 shows the distribution of answers to this question.

When the explanations about all three options are examined, it is seen that the participants touched on similar issues even though they marked different options. From the following explanations:

"It offered an opportunity to observe teacher-student relations, although not like in formal education." (Yes) (Participant 123)

 Table 6. Providing the opportunity to use teaching methods related to field. (n=246)

	Yes	No	Partially
f	37	121	86
%	15.2	49.6	35.2

Table 7. Observing a learning-teaching environment indistance education. (n=246)

N		Yes	No	Partially
246				
	f	69	85	89
	%	28.4	35	36.6

"We were able to observe the learning and teaching process, even from a distance, but there was a limited opportunity as education would be handled face to face, except in such cases." (Partially) (Participant 191)

"Although distance education did not provide a real learning-teaching environment, I was able to observe the process." (No) (Participant 105)

it is seen that participants think distance education, even if inadequate, offers them the opportunity to make observation.

The eighth question is "Do you think that teaching practice through distance education contributes to you in the fields of assessment and evaluation?" The distribution of answers to this question is seen in the Table 8.

When the explanations on the option *No* are examined it is seen that participants think distance education does not provide appropriate conditions to make assessment and evaluation. In this context, the following explanation can be given as an example:

"I think assessment and evaluation is a process. In this process, there must be suitable physical environments. Unfortunately, such an environment did not happen." (Participant 18)

When the explanations regarding the option *Partially* are analyzed, it is seen that most of the participants expressed their opinions as "*It contributed partly*". Besides, from the explanations of other participants it is understood that distance education offers limited opportunities in assessment and evaluation. The following explanation can be given as an example:

"Except for the activities in the book, we could not observe any assessment and evaluation situation, which is a very narrow scope for assessment and evaluation." (Participant 82)

When the explanations of the participants who marked the option *Yes* are examined, it is seen that they generally mentioned that they have gained experience on how to make assessment and evaluation through distance education.

"It has made an important contribution especially in the use of web2 tools in assessment and evaluation. If such a situation occurs again, we are experienced now." (Participant 115)

The ninth question is "*Have you received feedback from the teacher and supervisor about the practices you have made in the teaching practice through distance education?*" Table 9 shows the distribution of answers to this question.

The striking point in these findings is that the data on *Yes* and *No* options are close to each other. Explanations of on the option *Yes* as: "*We evaluated the performance of teachers and students in our weekly meetings with our advisor*." (Participant 10) and "*After our lectures, we talk about what should be and how with the teacher and supervisor*." (Participant 147) show that some

Table 8. Contribution of teaching practice through
distance education to the fields of assessment and
evaluation. (n=246)

evaluation. (ii 210)					
N		Yes No		Partially	
246					
	f	46	118	78	
	%	19	48.8	32.2	

Table 9. Receiving feedback from the teacher and supervisor about the practices in the teaching practice through distance education. (n=246)

U	Yes	No	Partially
f	91	87	66
%	37.3	35.7	27

teachers and supervisors are quite sensitive to give feedback. On the other hand from explanations on the option *No* as: "*I did not receive any feedback other than thanks*." (Participant 226) and "*The teacher and the supervisor were very insufficient in guiding us.*" (Participant 231) it is understood that some teachers and supervisors neglect to give feedback.

Explanations on the option *Partially* as: "*The teacher did her best, but supervisor could not be very helpful.*" and "*I got feedback from the supervisor, but I could not communicate with the teacher much.*" (Participant 59) show that, participants marked this option because they received feedback only from one of the teachers or supervisors.

When the participants' responses to the tenth question, which aims to determine their general thoughts on teaching practice through distance education, are examined, it is seen that those who expressed negative opinions mentioned that distance education does not provide classroom environment, it does not provide the opportunity to interact with students, and it does not allow the theoretical knowledge to be put into practice. The following explanations reflect the thoughts on these issues that most of the participants touched on:

"I could not get the necessary efficiency with distance education. It would be more efficient to conduct lessons with students in the classroom environment. I could not have the excitement of observing the students and doing activities together as I wanted." (Participant 24)

"There is not an interactive educational environment like in face-to-face education. As a result of this lack of interaction, the lessons are inefficient. Since there is not a concrete experience environment, we are lacking in applying what we have learned and providing experience." (Participant 152)

"Negative. We hardly have any contact with the student or the school environment. Unfortunately, we could not find an environment where we could apply what we learned theoretically in the undergraduate program." (Participant 206)

When the answers to the tenth question are examined, it is seen that some participants, even if they are few in number, expressed positive opinions. The common point of these thoughts is that the teaching practice through distance education offers the opportunity to experience that education can also be done with distance education. The following answer reflects this situation:

"In a way it was good. We saw that distance education can be done." (Participant 14)

DISCUSSION

Findings indicate that, most of pre-service teachers could not acquire the learning outcomes determined within the framework of the basic objectives of teaching practice with teaching practice through distance education. According to the pre-service teachers, the reasons for this situation are that the teaching practice through distance education does not provide a classroom environment; it is inadequate for communication and interaction with students. Sepulveda-Escobar and Morrison (2020), focused on the challenges and opportunities student teachers faced while doing their online teaching placement in their study. The findings of the study indicated that according to pre-service teachers distance education did not provide a real learning experience. Similar to our study, pre-service teachers attributed this to the lack of interaction with students. Flores and Gago (2020) argued that teaching practice is one of the problematic issues in initial teacher education during the pandemic. According to them, teaching practice with distance education did not compensate the lack of traditional teaching practice. While justifying this situation, they also mentioned the lack of classroom environment, lack of communication with students, and technical problems. Hadar et al. (2020) framed COVID-19 outbreak as case of VUCA (volatile, uncertain, complex, ambiguous) and aimed to examine the extent to which pre-service teachers were able to cope with the changes caused by COVID-19 as seen from the perspectives of both pre-service teachers and teacher educators. The results of the study showed that pre-service teachers struggle largely with VUCA situation and do not seem to receive sufficient preparation in the domain of social-emotional competencies. Hill (2021), in his study focused on pre-service teachers experiences during COVID-19 and explored uncertainties between clinical practice and distance learning. He has reached the conclusion in his study that pre-service teachers did not have the opportunity to demonstrate mastery of specific teacher performance expectations within the distance learning format. Al Abiky (2021) in his study aimed to identify the challenges facing pre-service English teachers while teaching online classes during school closure due to COVID-19. The findings of study revealed that pre-service teachers faced significant challenges while teaching online classes arising from nature of remote teaching, content delivery and limit, teaching styles, online assessment methods, and students' interest and differences. He argued that pre-service teachers felt lost, anxious, and enter survival stage as a consequence of these challenges.

The findings of the study also indicate that teaching practice through distance education enabled pre-service teachers to gain knowledge about distance education tools and experience on how to use them. Lei and Medweel (2021) in their study examined pre-service teachers' views on the process and their own teaching and learning in the context of online collaborative learning (OCL). According to pre-service teachers online collaborative learning helped them to develop different views of learning and had a positive effect on their views about the future use of it. Also they believed that their personal experience of OCL contributed their development as teachers. Lei and Medweel argued that online teaching can shape pre-service teachers' thoughts and professionalism. In another study Barinia and Psoni (2021), investigated the effect of online teaching practice and whether pre-service teachers developed skills beneficial for their future teachings. The findings of the study revealed that, pre-service teachers got acquainted with new technologies in education to a large extent and also they developed skills that will be beneficial for their future teachings such as adaptability, flexibility, and handling students' interaction in online settings. Sasaki et al. (2020) in their study aimed to determine the efficacy of using virtual reality simulations to prepare pre-service teachers to teaching practice. They found that levels of participants' confidence and placement preparedness increased as a result of simulation and de-brief session. They also argued that simulated classroom, which is an acceptable way to prepare pre-service teachers to their teaching practice, can be used as an alternative for supplementing or replacing teaching practice both during and after the current pandemic.

The findings of the study can also be associated with digital literacy which The American Library Association defines as "the ability to use information and communication technologies to find, evaluate, create and communicate information requiring both cognitive and technical skills" (ALA 2012, p. 1). Most of the pre-service teachers stated that the teaching practice they carried out with distance education during the pandemic period enabled them to learn how to use applications such as Google classroom and Zoom meeting for educational purposes. When this finding is evaluated with the definition of digital literacy, it can be concluded that pre-service teachers' teaching practice with distance education during the pandemic process contributed to their digital literacy skill.

CONCLUSION

Teaching practice, which is acknowledged as one of the basic elements of teacher training programs (Haigh & Tuck, 1999), is very important for pre-service teachers as it provides the opportunity to gain experience and the contributes to their professional development. The current pandemic, which felt its effect in all areas of life, also affected pre-service teachers' teaching practice. Pre-service teachers made their teaching practice through distance education, which is a new experience. The results obtained from this study show that pre-service teachers did not acquire the experience and knowledge expected to be gained through this type of teaching practice. The lack of experience and knowledge will inevitably affect the professional development of pre-service teachers negatively.

Besides causing many difficulties, the COVID-19 pandemic created a variety of possibilities. In this study, it has been revealed that pre-service teachers who did their teaching practice through distance education have obtained useful information about the content and use of distance education tools such as Google classroom and Zoom meeting. This finding shows that pre-service teachers can benefit from this information in case they will need to teach with distance education in the future. In addition, this experience gained by pre-service teachers may enable them to use distance education tools in the context of supplementary or support education in the times out of the schedule, for example on weekends. From the results obtained from this study, it is understood that the pre-service teachers who carried out teaching practice through distance education have a lack of knowledge and experience on the teaching profession. It is very important that teachers, who are the architects of future generations, are well-trained professionally. School administrators can contribute to the professional development of teachers (Boyd et al., 2011; Bredeson, 2000) and if the pre-service teachers have started their career, they can be supported by school administrators in order to eliminate this lack of knowledge and experience. If pre-service teachers have not started their career, universities can prepare additional programs for them to fill this deficiency.

La Velle et al. (2020) argued that, with the impact of COVID-19, "the opportunities to develop a new pedagogy for online teacher education have opened up dramatically" (p. 606). The results of our study also show that pre-service teachers who did teaching practice through distance education gained knowledge and skills on distance education tools. Therefore, universities can plan the teaching practice program as including distance education tools in order for pre-service teachers to gain knowledge and skills about these tools. Researchers can conduct studies to determine the effectiveness of the above-mentioned implications.

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