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Research Paper

Prospective Pre-School Teachers' Distance Education Perspectives

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ABSTRACT

Background: Distance education is a science-based system that supports learner independence through technology.
Purpose: The aim of this study is to evaluate the distance education system according to the experiences of prospective teachers studying the preschool education curriculum.
Methodology/Approach: The research was conducted with a phenomenological design, one of the qualitative research methods. In this research, the study group was formed by selecting a number of first, second and third grade students on the preschool education programme to represent the study universe, and the study group of the research was determined with the stratified sampling method of non-probability sampling. The research data were collected through focus group interviews using a telecommunication tool. The collected data were analysed using the content analysis method.
Findings and Discussion: According to the research findings, the prospective preschool teachers stated that the distance education system had a positive effect on the learning process in terms of convenience, saving time and money, use of technology, and flexibility. The participants reported that the distance education system affected them positively in terms of use of technology, self-discovery, time saving, acquisition of research skills and motivation, whereas it affected them negatively with regard to inefficiency, lack of communication, internet problems, and deterioration in social skills.

INTRODUCTION

Education systems that enable society to change and develop are shaped in line with society's expectations. In the education system, which is regarded as one of the areas that societies are most in need of nowadays, different practices are seen depending on conditions and facilities. These practices can generally be classified under different headings such as face-to-face education, formal education, informal education, distance education, universal education, and modular education. In recent times, distance education is among the practices that have gained importance in the education system. The aim of this study is to evaluate the distance education system according to the experiences of prospective teachers studying the preschool education curriculum.

Distance education is can be defined as a system in which the teacher and student are separated, formally and systematically organised teaching and learning activities are included, and interaction and cooperation are used (Ubon & Kimble, 2002). The distance education theorist Nipper (1989) defines distance education as a system based on science and technology. The theory of interaction and communication, developed by Holmberg (1987), emphasizes the importance of interaction and communication between student and teacher in distance education. Peters (1994) defines the administrative and pedagogical applications of distance education and draws the theoretical framework, emphasized the importance of student responsibility in distance education, provision of appropriate teaching materials and infrastructure conditions in the industrial theory. The equivalency theory proposed by Simonson, Schlosser and Hanson (1999) in line with Keegan's criteria emphasizes the importance of providing equal learning experiences to students. According to this approach, providing equal learning opportunities for each student in distance education and face-to-face education is important in achieving the teaching objectives of the course. Paulsen's (2008) theory of cooperative freedom stipulates the freedom of students to take responsibility for their own learning, on the other hand, the need to cooperate with stakeholders in the distance education process. Wedemeyer (1971) emphasized that the distinguishing feature of distance education is independence and put forward the theory of independent study. Wedemeyer's independence theory has a perspective that frees teachers and students from excessive workload and allows them independence in the process. Emphasizing that universities should be reshaped with modern technologies instead of outdated learning and teaching methods, Wedemeyer developed a system that supports learner independence through technology (Simonson, 1999). According to Wedemeyer (2010), there are four main elements in education: teacher, student or students, communication system and things to be taught. If these elements are arranged in accordance with the student, this contributes to the development of the relationship between teacher and student. Starting from here, it can be said that distance education is a technology-based system that fosters independence and responsibility in the student. To be able to eliminate limitations among learners, instructors and learning resources in distance education, current technologies are used with a pragmatist approach (Bozkurt, 2017). Distance education, which incorporates large student populations at primary, secondary and high school levels, has become a system that develops, implements and tests patterns of thought and behaviour (Anderson & Dron, 2011). Expressed in different ways such as online learning, internet-based learning and distance learning, the

use of distance education continues to expand rapidly, especially in higher education (Ally, 2004). Considered at a global level, distance learning in higher education is evaluated within the scope of international education. International education is a system in which global programmes are implemented with information and communication technology, and which has been developed with the idea of lifelong education (McBurnie, 2002). Social, economic and technological developments supported by the internet have also created a revolution in traditional concepts of the economy, administration and education (Taylor, 2002), and with these developments occurring in the field of information and communication technologies, a large increase has also occurred in international education opportunities offered by distance education (Bozkurt, 2017).

Distance education is used to meet educational needs that cannot be met with different methods in different education levels in developing countries as well as in countries with experience in education (Karataş, 2003). Distance education, which can prioritise the provision of education environments in line with the needs of individuals and society, and which provides advantages such as freedom of time and space, has become even more necessary, indeed obligatory, especially due to the Covid-19 pandemic and the accompanying social isolation experienced nowadays. Due to the suspension of face-to-face education by education institutions, around half of students at all educational levels around the world have suffered from interruption of their education (UNESCO, 2020). Following this exceptional situation in which extraordinary times require extraordinary measures, the widespread trend in education systems globally has been to respond to the Covid-19 pandemic with "emergency e-learning" protocols and rapidly transfer face-to-face classes to online systems (Murphy, 2020). Following the outbreak of the pandemic, different implementations, such as blended learning, which is defined as the structuring of online and face-to-face education in different combinations (Graham, Allen & Ure, 2003), or the hybrid model, defined as a combination of classroom- and internet-based learning (Ubon & Kimble, 2002), have been put into practice globally. As a result of this transfer of lesson contents to the online environment, the necessity has emerged for restructuring of distance education practices in order to develop 21st century skills like innovation in learning, digital literacy, possession of life and career talent, analytical thinking, communication, and innovation (Trilling & Fadel, 2009). The success of distance education depends on knowledge of instructor-student needs and identification of the target group (Valentine, 2002). Within this new system, in which the roles of the learner and instructor have changed, it has also become necessary to define the new roles of higher education institutions. In the distance education process, to be able to train a qualified work force that can create knowledge and keep up with scientific developments, equipping learners and instructors with new skills and competences is one of the main responsibilities of higher education institutions (Bozkurt, 2020). If distance education is to be the education model of the future, it must be emphasised that distance education requires a comprehensive and sophisticated evolution, and the necessary revisions must also be made in higher education. During this process, in the environment created by e-learning systems, appropriate class activities and evaluations should be developed in which technical support is provided in company with specialists (Harnar, Brown & Mayall, 2000), and together with technical innovations, social innovation should also be included (Karpenko, 2008). With the necessary arrangements that are to be made, distance education can be systematised as the education model of the future by converting its disadvantages into advantages, and equality of opportunity can be enabled for all students.

Distance education makes it possible for all individuals to gain the right to obtain quality education, which is their own constitutional right, in accordance with their life conditions, psycho-physiological characteristics and social situation (Karpenko, 2008). However, despite the many advantages of distance education, it is accompanied by problems that need to be solved. Factors such as differences in technological literacy, learning styles, financial resources, and attitudes of educators and students appear before us as problems that affect the quality of education and are each related with one another (Turoff, 1997; Valentine, 2002). For an effective and productive learning in the distance education process, besides educational needs such as providing suitable feedback on time, social-emotional needs should also be given attention, and creative solutions for pedagogic problems that are encountered in this period should be generated with human-centred designs (Katzman & Stanton, 2020; Robinson, Al-Freih & Kilgore, 2020).

Today, with the rapid spread of distance education in the field of education all over the world, studies in this field have gained importance. When the related literature is examined, it is seen that there has been an increase in the number of studies related to distance education since the beginning of the 2000s (Horzum, Özkaya, Demirci & Alpaslan, 2013; Machtmes & Asher, 2000; Saba, 2000), and that together with this increase, comparative studies have been made whose aim is to reveal that distance education is as effective as face-to-face education (Hung, 2016; Johnson, Veletsianos & Seaman, 2020; Metin, Karaman & Şaştım, 2017). It is determined that in the literature, various studies have been conducted related to increased distance education practices resulting from the Covid-19 pandemic (Adnan & Anwar, 2020; Basilaia & Kvavadze, 2020; Händel et al., 2020; Koçoğlu & Tekdal, 2020; Pınar & Dönel-Akgül, 2020), but that the number of studies examining the innovations and changes occurring in the distance education process in line with the views of learners is insufficient. All over the world, teacher training programmes have been faced with urgent transfer to distance education due to the Covid-19 pandemic, and in Turkey, too, part of the spring term of the 2019-2020 academic year was completed with face-to-face education, while the other part was completed with distance education. During this process, prospective teachers have had the opportunity to evaluate and compare the two different implementations within the same term based on their own experiences. In this direction, this study was carried out on the basis of Wedemeyer (1971) independent study theory to evaluate the practices of how the distance education system is applied under what conditions, to focus on the learning process and its effect on learners, and to reveal the strengths and weaknesses of the system. The research focuses on the teaching process and the student, which are two important elements of the education system. How distance education is perceived by learners guides distance education practices and expectations regarding distance education determine the evaluations made on this issue. It is considered that this study, which has been conducted based on the experiences of prospective teachers during this process, will pave the way for further studies related to the distance education process, and that, by revealing the shortcomings experienced in the process according to the feedback provided by prospective teachers, it will contribute to the implementation of the necessary revisions.

This research aims to examine the experiences of prospective pre-school teachers towards distance education. In this direction, the sub-aims of the study are as follows:

(1) The effect of the distance education system on the learning process,
(2) The effect of the distance education system on prospective preschool teachers,
(3) The changes that distance education will bring about in the later learning process, and
(4) The effect of the distance education system on prospective preschool teachers' professional development.

METHOD

In this section of the study, the research model, study group, data collection tool and data collection, data analysis, and validity and reliability subheadings are explained in detail.

Research Model

This research aims to evaluate the distance education system according to the experiences of prospective teachers studying the preschool education curriculum. Within this scope, the research was conducted with a phenomenological design, one of the qualitative research methods. Qualitative research aims to reveal how individuals evaluate experience, how they create the environment they experience, and the meanings they attach to their experiences (Merriam, 2009). Phenomenological studies make a common sense from the experiences of a few people about a phenomenon or concept (Creswell, 2014). The purpose of phenomenology research in education is to understand the experiences in the education and training process and to improve the learning teaching process (Ersoy, 2017). In this study, a group of prospective teachers focused on the distance education experience in the teaching process, and "interpretive phenomenology" was preferred as it was aimed to understand the experiences of the participants and to discover what happened in the process (Creswell, 2014).

Study Group

As phenomenological studies are based on personal experiences, the participants of the research are individuals who have experienced these experiences. Thus, data are collected in phenomenological research through first-hand and personal experiences. The participants of this study consisted of prospective preschool teachers who experienced the distance education process. The study group of the research was determined with the stratified sampling method of non-probability sampling. Stratified sampling is a sampling method used in cases where there is a universe made up of subunits or strata whose partitions have been defined (Dawson, 2001). The criteria that are determined for separating the universe into strata are given importance according to their suitability for the aim and variables of the research (Vogt, Gardner & Haeffele, 2012). In this research, the study group was created by selecting a number of 1st, 2nd and 3rd grade students attending the preschool education department to represent the universe.

Table 1. Participant information

Participant code	Age	Gender	Grade level
P-1	21	Male	1st grade
P-2	22	Female	3rd grade
P-3	20	Male	2nd grade
P-4	18	Female	1st grade
P-5	19	Female	1st grade
P-6	31	Male	3rd grade
P-7	22	Male	3rd grade
P-8	19	Female	2nd grade
P-9	22	Female	3rd grade
P-10	29	Female	2nd grade
P-11	21	Male	2nd grade
P-12	20	Female	1st grade
P-13	22	Female	2nd grade
P-14	20	Male	1st grade
P-15	20	Female	1st grade
P-16	22	Female	3rd grade
P-17	20	Female	2nd grade
P-18	20	Female	1st grade

When Table 1 is examined, it can be seen that the study group consisted of prospective teachers studying the preschool education curriculum. The participants were determined by considering gender and a number that would represent the universe in accordance with the stratified sampling method. Within this scope, the study group included 7 participants (2 male and 5 female) attending 1st grade, 6 participants (2 male and 4 female) attending 2nd grade, and 5 participants (2 male and 3 female) attending 3rd grade. Participants are between the ages of 18-31.

Data Collection Tool and Data Collection

Phenomenological studies investigate the meanings attached by the participants of the research to phenomena, events and actions, by seeking answers to the questions 'why?' and 'how?' Furthermore, they aim to reveal the participants' experiences related to the problem situation that is the subject of the research by using methods such as observation and interview (Gliner, Morgan & Leech, 2011). Within this scope, the data were collected with the focus group interview method and the semi-structured interview technique. The semi-structured interview technique enables the interviewer to access detailed data by directing extra questions to participants in addition to the questions addressed in the interview form (Longhurst, 2003). In the semi-structured interview form, questions are related to reveal the distance education experiences of prospective teachers in line with the main and sub-objectives of the study. The prepared semi-structured interview form was sent to 2 specialists in the field and 2 linguists to seek their views, and the form was revised in accordance with these views. In this direction, a pilot focus group interview was held with 3 participants. Following these steps, the semi-structured interview form was given its final shape, and the main research was begun. The research was carried out by using a telecommunication tool. In this study, the data were gathered via focus group interview and the data were recorded after obtaining permission from the participants. The group dynamics of focus group interviews have vital importance for gathering in-depth data and expressing the views of the participants in a more open and detailed way (Bowling, 2002). Prior to commencement of the focus group interview, the participants were informed about the aim, scope and confidentiality of the research, and it was explained that the data would be gathered accordingly. The participants were brought together with a long-distance interview technique while adhering to the focus group interview method. The questions were read out to the participants in order, and, by benefiting from group dynamics, the participants were asked to first state the number of participants and then to describe their experiences and views related to the relevant problem question of the research. At collecting data process, questions were asked to each participant to remember, think and explain their experiences, and the data collection process was made effective by giving the necessary time. A certain order was not followed during the interview, and participants expressed their experiences and views when they were ready to convey them. In the study, a one-hour focus group interview was conducted with each grade level, and the interviews lasted three hours in all and interviews were recorded. During the interviews, in cases when the researcher did not find the data to be adequate or sufficiently detailed, participants were asked additional questions, and care was taken to make these appropriate for the aim of the research. With the semi-structured interview technique, the researcher can access detailed data in interviews by addressing extra questions to participants (Büyüköztürk, Kılıç-Çakmak, Akgün, Karadeniz & Demirel, 2012).

Data Analysis

The data of the research were analysed using the content analysis method. Content analysis is an empirical technique that investigates social facts systematically and objectively in terms of content and form, and in this context, aims to reveal these social facts by making deductions (Gökçe, 2006). In other words, content analysis reveals the concepts and relationships on the basis of the data. In this direction, the data are conceptualised and organised, and themes are created. The analysis of the data is carried out in six stages, namely, making the data suitable for analysis, reading the data in detail, coding the data, providing information related to the participants, creating the themes, and reporting the analysis results (Creswell, 2014). Adhering to these stages, the audio recordings of the data collected through the focus group meeting in the first stage and reflecting the experiences and thoughts of the participants were edited in computer environment and transformed into text and individual transcripts were created and made ready for analysis. At the second stage, the data were read in detail, and similar and related statements were listed one under the other. At the third stage, coding was performed by paying attention to similarity and relatedness in the data and to the problem questions of the research. At the fourth stage, demographic information related to the participants' age, gender and grade level variables was compiled. At the fifth stage of the analysis, the themes were created by combining the codes determined in line with the aim of the research, and at the sixth stage, all the obtained information was reported. In the report section of the research, the themes and codes were made clear and understandable in the form of figures. Participants' experiences with the case studied were quoted with examples from their own expressions. According to Koballa, Graber, Coleman and Kemp (2000), in phenomenological studies, individuals' evaluations of the phenomenon discussed are not evaluated as wrong or correct, but rather the definitions of the phenomenon are included.

Validity and Reliability

In this study, validity and reliability were examined in terms of credibility (internal validity), transferability (external validity), consistency (internal reliability) and confirmability (external reliability), as stated by Lincoln and Guba (1985). Accordingly, to ensure the credibility of the research, a sufficient period of time was allocated for the interviews, and details were accessed with additional questions in necessary cases. Moreover, care was taken to ensure that the data conformed with the facts. To ensure the transferability of the research, clear, understandable language was used and the data obtained in the interviews were included in the research report with direct quotations taken from the relevant sections. The research data were analyzed objectively without personal information and coded in the form of P1, P2, P3… instead of the participants' names in the direct quotations section. For the consistency of the research, the formula for inter-rater consistency developed by Miles and Huberman (1994) was used: Agreement = [Number of Agreements/(Number of Disagreements + Number of Agreements) X 100]. Accordingly, a 90% rate of consensus between the expert views was determined. For the confirmability of the research, the participants were asked to endorse the findings, and, moreover, the obtained data were archived.

FINDINGS

In this section of the research, statistical information related to the findings is included. The research findings are explained in detail in the form of figures and quotations.

Effect of Distance Education System on Learning Process

First problem question aims to investigate the positive and negative effects of the distance education system on the learning process.

Positive

In Figure 1 below, the findings obtained from the experiences of the participants regarding the positive effects of the distance education system on the teaching process are given.

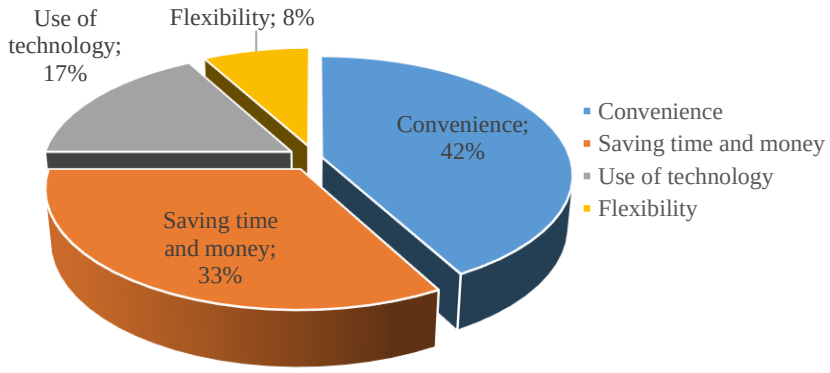

Figure 1. Positive effects of distance education system on learning process

When Figure 1 is examined, it is seen that the distance education system positively affected the learning process in 4 subthemes. In order of importance, these subthemes are convenience (42%), saving time and money (33%), use of technology (17%), and flexibility (8%). Positive views expressed by the participants with regard to these subthemes are included below.

> 'Unlike in formal education, problems with compulsory attendance and lesson times did not occur. Since video recordings and lesson notes are shared via the system, situations like not taking notes in lessons and being late for lessons did not arise. The notes could be accessed whenever and wherever students wished.' (P-9)

> 'The fact that there were no place or time constraints allowed us a flexible life, that is, we could enter our lessons wherever we wanted, or even if we couldn't enter the lesson at that time, we could repeat it later.' (P-10)

> 'As teacher candidates, we had time that we could set aside for ourselves, and also, this process taught us not only how to carry out our responsibilities, but also how to think quickly and generate practical solutions in order to develop ourselves.' (P-16)

Examination of the positive responses given to the first problem question of the research reveals that most of the participants stated that the distance education system made the learning process more convenient. The participants emphasised the saving of time and money enabled by the distance education system, the importance of the function of technology, and the flexibility that the system brought with it.

Negative

In Figure 2 below, the findings obtained from the experiences of the participants regarding the negative effects of the distance education system on the teaching process are given.

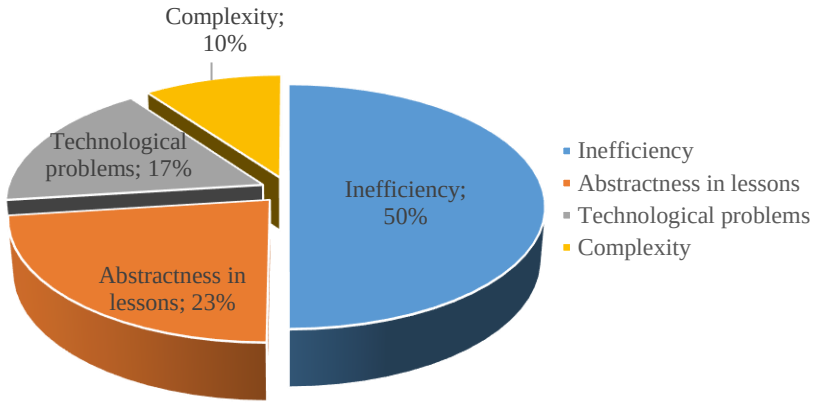

Figure 2. Negative effects of distance education system on learning process

When Figure 2 is examined, it is seen that the distance education system negatively affected the learning process in 4 subthemes. In order of importance, these subthemes are inefficiency (50%), abstractness in lessons (23%), technological problems (17%), and complexity (10%). Negative views expressed by the participants in relation to these subthemes are included below.

> 'The most important negative aspect of distance education is that because the student is not in a classroom environment, he/she does not feel that he/she is a student. Moreover, difficulty in internet access also occurs. Online learning has negative consequences for some students living in rural areas. Furthermore, not everyone is disposed towards technology.' (P- 15)

> 'The spring term was not spent very productively. Learning could not be achieved in full because the required activities could not be completely carried out and the required subjects were not fully taught.' (P-17)

> 'The most important negative aspect was the problem of internet access, since not everyone's lives and opportunities are at the same level. Our disadvantaged friends had many problems related to accessing the lessons.' (P-2)

When the negative responses given to the first problem question of the research are examined, it is seen that the majority of participants stated that the distance education system led to inefficiency in the learning process. Furthermore, the participants stated that the lessons were spent in an abstract way, in other words, that lessons conducted by doing and experiencing were of more benefit, and they also stressed technological problems and the complexity of the system.

Effect of Distance Education System on Prospective Teachers

Second problem question aims to investigate the positive and negative effects of the distance education system on prospective preschool teachers.

Positive

In Figure 3 below, the findings obtained from the experiences of the participants regarding the positive effects of the distance education system on the prospective teachers are given.

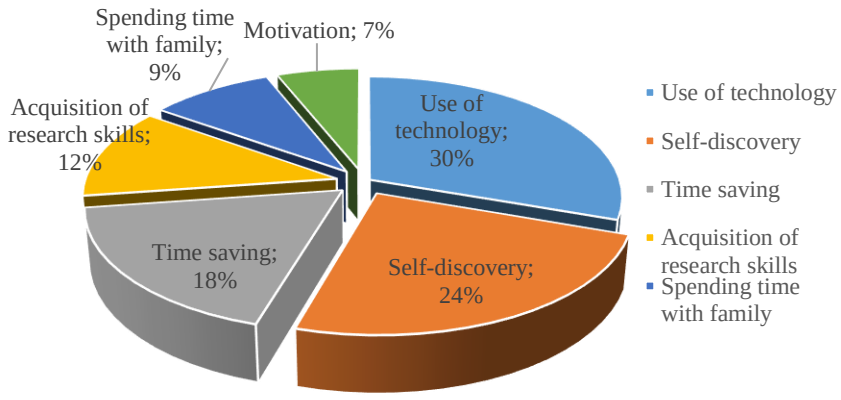

Figure 3. Positive effects of distance education system on prospective teachers

Examination of Figure 3 reveals that the positive effects of the distance education system on prospective teachers can be grouped under 6 subthemes. These subthemes are listed in order of importance as use of technology (30%), self-discovery (24%), time saving (18%), acquisition of research skills (12%), spending time with family (9%), and motivation (7%). Below are some positive views of participants related to these subthemes.

> 'Most importantly, during such a period we had the chance to set aside more time for ourselves and more time to develop ourselves. I can say that the creation of lessons by distance learning not only enabled us to advance in our lessons without experiencing any loss during the term, but also benefited us in the sense that we made positive progress regarding positive use of technology in areas where we will have to use technology at the highest level during future pandemics and events like these.' (P-2)

> 'The students did not go to school and took their classes in a shorter time than in normal lesson hours. This enabled time saving. They were able to listen to the lessons wherever the internet was available. Since the lesson is recorded in the system, the student can always listen again to parts that he/she does not understand, anywhere and at any time.' (P-3)

> 'The teacher candidates began to learn different techniques related to what they could do with the facilities at hand and how they could teach children without direct contact. Some of them learned various programs for generating things for their students. Others spoke about their creativity with videos.' (P-11)

When the positive responses given to the second problem question of the research are examined, it is seen that most of the participants stressed the importance of using technology. Furthermore, the participants reported that they discovered themselves. The participants stated that with the distance education system, they saved time, acquired research skills, spent time with their families and were highly motivated.

Negative

In Figure 4 below, the findings obtained from the experiences of the participants regarding the negative effects of the distance education system on the prospective teachers are given.

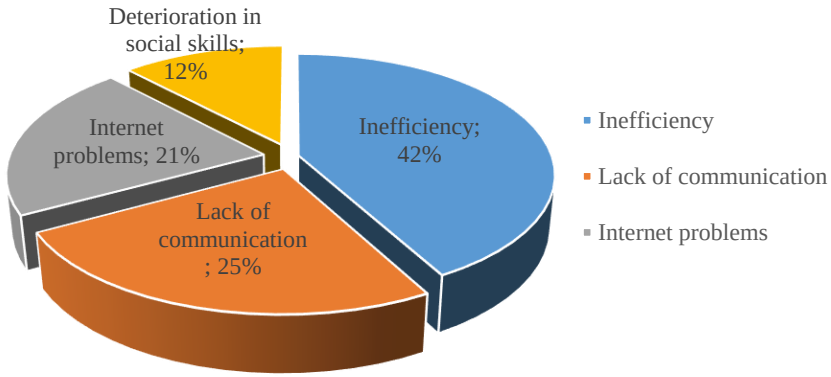

Figure 4. Negative effects of distance education system on prospective teachers

Examination of Figure 4 reveals that the negative effects of the distance education system on prospective teachers can be grouped under 4 subthemes. These subthemes are listed in order of importance as inefficiency (42%), lack of communication (25%), internet problems (21%), and deterioration in social skills (12%). Some negative views expressed by participants regarding these subthemes are given below.

> 'In my opinion, it is important to establish contact and socialise with the student. In class, when a teacher candidate sees other teacher candidates, perhaps he/she will wish to create things like they do. Now, however, since he/she cannot see what his/her friends are doing, I believe that if he/she is not very warm towards the teaching profession, this may cause him/her to really grow cold towards it. In my opinion, the fact that we cannot enter the drama lessons will cause problems for us in the future.' (P-11)

> 'Many students live in villages. Not only the lack of internet facilities, but also the lacks of technological tools like smart phones and computers have a negative effect on these students' education. Students who do not have such facilities fall behind in their lessons and exams. A number of students had to suspend their studies in the spring term. We all know that it is not easy to become a teacher.' (P-14)

Examination of the negative responses given to the second problem question of the research reveals that the majority of participants stated that the distance education system was unproductive for prospective teachers. Moreover, participants reported that there were deficiencies in communication, that problems occurred with internet access, and that there was deterioration in social skills.

Changes that Distance Learning System will Bring about

Third problem question aims to investigate the changes that the distance education system would bring about in the later process. In Figure 5 below, the findings obtained from the experiences of the participants regarding the changes that the distance education system will reveal in the teaching process are given.

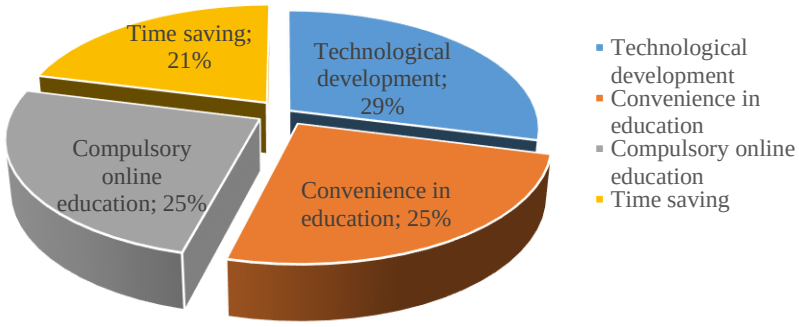

Figure 5. Changes that distance learning system will bring about

Examination of Figure 5, it is seen that the changes that the distance education system will bring about can be grouped under 4 subthemes. These subthemes are listed in order of importance as technological development (29%), convenience in education (25%), compulsory online education (25%), and time saving (21%). In relation to these subthemes, some views expressed by participants regarding the changes that the distance education system would bring about are included below.

> 'This pandemic we are going through has shown us the importance of education once again. Whatever the conditions may be, it has to continue. After this process, people will be able to use information technology in the name of education more advantageously. Perhaps some universities will continue with online education. We may be able to receive education from another university of our choice.' (P-18)

> 'I believe that in the future, online education will be more widespread and that we will all adapt to this system. I reckon there will be courses on online platforms. During the online education process, there will not be a fixed schedule, and people will be able to set their own times for themselves. At the same time, money will also be saved in online education. In short, in the future, we will see that education is not confined to four walls.' (P-15)

> 'In the future, it is expected that the necessary infrastructure and capacity will be provided for online education, since we have to bear in mind that not everyone has the same opportunities. It can be expected that courses related to this will be introduced in teacher training faculties in particular, since we do not receive enough training in technology and we are not able to prepare for platforms like those.' (P-7)

When the responses given to the third problem question of the research are examined, it can be seen that participants stressed that changes would occur in the education system in terms of technological development, convenience in education, compulsory online education, and time saving.

Professional Development Plans

Fourth problem question aims to investigate the prospective preschool teachers' views related to professional development in the distance education system. In Figure 6 below, the findings obtained from the experiences of prospective teachers for professional development plans in the distance education system are given.

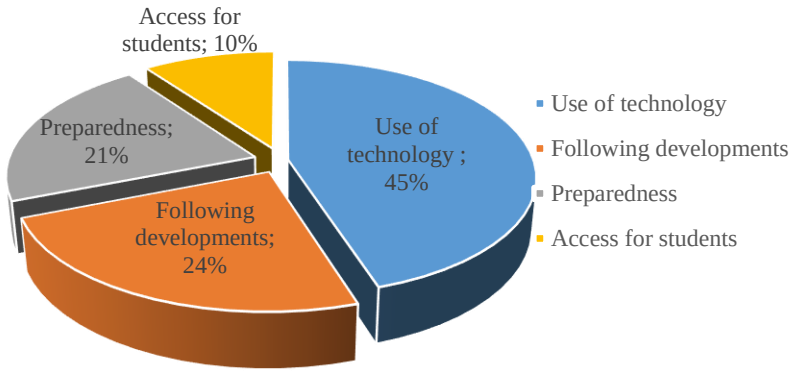

Figure 6. Prospective teachers' professional development plans

Examination of Figure 6 shows that the prospective preschool teachers' professional development plans in the distance education system can be grouped under 4 subthemes. In order of importance, these subthemes are listed as use of technology (45%), following developments (24%), preparedness (21%), and access for students (10%). Prospective preschool teachers' views related to the professional plans they considered making in the distance education system according to these subthemes are given below.

> 'As a teacher candidate, by considering things like these, I wondered how I could provide the best education on such platforms, but I do not believe that distance education will be very productive for our field. We hope that the necessary efforts will be made.' (P-7)

> 'We have to possess the necessary competencies to provide distance education. While other age groups can carry on with their education somehow, the task becomes more difficult for preschool groups. Therefore, the most important duty falls on us, the preschool teachers and candidates. We have to find solutions without hindering children's social-emotional development and motor development or allowing deficiencies.' (P-9)

> 'In my opinion, I have to develop myself in every way. Especially in the digital environment, I have to be more competent. A teacher has to be ready to provide education on all kinds of platforms. If education is given in the digital environment instead of face-to-face in the future, teachers must be competent in this area and be able to provide education without any problems. In short, we have to be both social and digital teachers.' (P-14)

When the responses given to the fourth problem question of the research are examined, it is seen that the majority of participants emphasised the use of technology. Furthermore, the participants stated that following developments related to the distance education system and technology, and making preparations in this context were among their professional development plans.

DISCUSSION

The aim of this study was the evaluation of the teaching process in distance education and the situations related to the student, and the presentation of the practices within the scope of independent study theory through the experience of prospective preschool teachers. In teacher training programmes, in which practical courses are given priority, the acceleration of the adaptation process by identifying the deficiencies that appear in the distance education process is very important in terms of completing the process of providing prospective teachers with the necessary knowledge and skills. During this period, when changes in technology are increasing rapidly and its use is becoming essential, it is expected that prospective teachers will be prepared for working life, and that they will develop themselves in this direction by correctly evaluating their competences for distance education, which is regarded as the education system of the future. This study is limited to the experiences of prospective pre-school teachers studying at the first, second and third grade levels at a state university.

The first problem question determined in line with the aim of the research aimed to investigate the positive and negative effects of the distance education system on the learning process. Examining the research findings, the participants stated that the distance education system positively affected the learning process in terms of convenience, saving time and money, use of technology, and flexibility. The findings revealed that the majority of participants reported that the distance education system facilitated the learning process. This can be explained by the fact that the distance education system allowed participants to access courses from anywhere and to view the recorded lessons later. Parallel to this, the participants emphasised the saving of time and money made possible by the distance education system, the importance of the function of technology, and the flexibility that the system provided. It can be said that distance education allowed participants to make savings in terms of both time and money that they tried to become familiar with the system by using technology more for educational purposes and that because they were able to move at their own individual speed in distance education, they regarded the process as flexible. According to Wedemeyer (2010), distance education should provide students with the opportunity to work as they want without space and time constraints and facilitate the teaching process. When similar studies are examined, it is seen that findings were made to the effect that participants saved time with flexible

education, that watching the video recordings again was positive and beneficial for students (Serçemeli & Kurnaz, 2020), that following lessons via distance learning could be productive as long as the internet was made available (Metin et al., 2017), that distance education was suitable for individual learning at one's own pace (Keskin & Özer-Kaya, 2020), that the rapid switch to the online type of education was successful, and that the experience that was gained could be used in the future (Basilaia & Kvavadze, 2020). The results obtained support the positive contribution of the distance education obtained in this study to the teaching process. The participants also stated that the distance education system negatively affected the learning process in terms of inefficiency, abstractness in lessons, technological problems, and complexity. When the research findings are examined, it is seen that most participants stated that the distance education system resulted in inefficiency in the learning process. This may stem from the fact that during the pandemic, education institutions were not fully prepared for the distance education system. Furthermore, the participants reported that the lessons were spent in an abstract manner, in other words, that lessons carried out by doing and experiencing were more beneficial, and they also emphasised technological problems and the complexity of the system. It can be said that due to deficiencies in the infrastructure of the distance learning process, participants had difficulty in following the lessons in the system, and that they had difficulty and experienced confusion in adapting to the different programs used in the distance learning process. According to Wedemeyer (2010), the relationship between teacher and student is very important in the distance education process and teachers should spend more time with students. In addition, different methods and techniques should be used in order for their applications to be successful. The insufficient instructor-learner interaction in distance education compared to face-to-face education may have led the prospective teachers to believe that the lessons were unproductive and abstract. The findings of similar studies reveal negative experiences to the effect that the distance education process did not suit the learning styles of all students, that not all subjects could be taught via distance education (Bircan, Eleroğlu, Arslan & Ersoy, 2018), that there was no or limited student-teacher interaction (Hebebci, Bertiz & Alan, 2020), that there were technical problems, network connection instability, and inadequate equipment (Adnan & Anwar, 2020; Kruszewska, Nazaruk & Szewczyk, 2022; Shim & Lee, 2020), and that there was a lack of work productivity and motivation (Johnson et al., 2020). The results obtained in other studies in relation to the distance education process show consistency with the findings of this study.

The second problem question determined with regard to the aim of the research aimed to investigate the positive and negative effects of the distance education system on prospective teachers. Examination of the research findings reveals that the participants expressed the positive effects of the distance education system on prospective teachers as use of technology, self-discovery, time saving, acquisition of research skills, spending time with family, and motivation. It is seen that the majority of the participants stressed the importance of using technology. This may stem from the fact that the distance education system is based on technology, and to the belief that being a teacher who has a command of technology will improve the quality of education. Furthermore, the participants declared that they were able to discover themselves. It may be concluded from this that the participants set aside time for reading and thinking. In addition, the participants reported that with the distance education system, they saved time, gained research skills, were able to spend time with their families and were highly motivated. It can be said that the distance education system enabled participants to make arrangements depending on their own learning styles, and that while this increased their motivation; it also enabled them to use their time more efficiently. According to Wedemeyer (1973), distance education gives students whose living conditions and learning styles are different from each other, to set their own learning goals and to develop their learning programs. This student-oriented system is compatible with student needs, comfort and individual life situations. The positive effects of distance education have been demonstrated by similar studies (Nambiar, 2020; Sepulveda-Escobar & Morrison, 2020). The participants also expressed the negative effects of the distance education system on prospective teachers as inefficiency, lack of communication, internet problems, and deterioration in social skills. The majority of participants stated that the distance education system was unproductive for prospective teachers. The principal reason for this may be that especially the content of practical lessons could not be sufficiently filled and that practice-based activities could not be carried out. Furthermore, participants stated that there were deficiencies in communication, that problems with internet access occurred, and that there was a deterioration in social skills. It can be said that because instructor-learner and learner-learner interaction could not be adequately provided in the distance education process, problems with communication and socialisation occurred, and that at the same time, technical problems such as lack of internet access had a negative impact on participants. In order to individualize assessment and progress in the distance education process, all stakeholders should be actively involved in the learning and teaching process (Wedemeyer, 1973) and students should be supported by giving importance to interpersonal interaction in this process (Holmberg, 1987). Prospective teachers need more personalized social learning experiences (Shearer et al., 2020). Examination of similar studies reveals that students considered themselves competent with regard to autonomous learning, but incompetent in terms of online learning control (Demirel & Coşkun, 2010; Händel et al., 2020; Sarıtaş & Barutçu, 2020). These results demonstrate that students who take responsibility for their own learning will decrease their dependence on guided learning and make them feel self-confident. The results obtained in this study show that prospective teachers need more support and guidance in the distance education process.

The aim of the third problem question determined in line with the aim of the research was to investigate the changes that the distance education system would bring about in the later learning process. When the research findings are examined, it is seen that the participants stressed that the distance education system would cause changes in the education system in terms of technological development, convenience in education, compulsory online education, and time saving. In the opinions of the participants, this situation reveals that since the distance education system is technology-based and that technology has an important place in education, developments in technology are likely to occur in this context. In this process, higher satisfaction scores of universities with high distance education capacity reveal the importance of technology (Karadag, Su & Ergin-Kocaturk, 2021). In addition, it can be concluded that considering the participants' experiences, due to the development of technology, education will be easier and it will be possible to save time. These results are consistent with the results of the research regarding the effect of distance education on the teaching process and students. When related studies are examined, it was argued that in the new period, especially with regard

to the experiences of disadvantaged students with different socio-demographic characteristics, it was important to deal with the problems of distance education successfully in order to create a work-life balance in the future (Händel et al., 2020; Koçoğlu & Tekdal, 2020). In distance education, the greatest responsibility for learning belongs to the learner, and the digital skills required for the information age and knowledge of digital literacy are among the subjects that need to be primarily focused on in distance education. This period, it is very important for education processes to be implemented that allow learners flexibility and the right to choose, and that can develop inquiry, research, and self-management skills and a critical perspective in them (Bozkurt, 2020). The research findings related to the changes that will occur in technology and the education system show consistency with the expectations of participants in this study regarding changes that will occur in the education system.

The aim of the fourth problem question determined in line with the aim of the research was to reveal the prospective teachers' professional development plans in the distance education system. Examining the research findings, it is seen that the use of technology, following developments, preparedness, and access for students were among the prospective teachers' professional development plans in the distance education system. It is seen that most of the participants stressed the use of technology. This shows that technology is one of the most important elements of the distance education system. Therefore, it can be seen that the participants gave importance to improving themselves in the field of technology. Moreover, the participants reported that following developments in technology and the distance education system, and being prepared in this respect were among their plans for professional development. It can be said that the teacher candidates expected that the changes that occurred in this process would have an effect on their future professional experiences, and that in this sense; they believed that they had to develop their own competences with different practices. Distance education offers education opportunities to more people of all ages in different learning environments (home, library, workplace) (Wedemeyer, 1973). In this respect, it is very important to integrate the use of technology into teacher training programs and to provide equal opportunities to students in distance education. Distance education could benefit students at the level of theoretical knowledge but that there could be deficiencies in practical skills (Keskin & Özer-Kaya, 2020). In this period, it is very important for prospective teachers, who are responsible for the task of learning and who need to possess certain competences for fulfilling their responsibilities, to develop new learning skills with adequate self-confidence and to acquire the necessary professional competences by taking responsibility for their own learning (Gordon, 2010). The research results related to being open to the changes that will occur in the teaching profession in the future along with the changes that will occur in the education system show similarity with the findings of this study.

CONCLUSION

When the distance education practices were examined in line with the experiences of prospective preschool teachers, it was found that distance education had positive and negative effects on the teaching process and participants, and they had a tendency to compare their experiences in this process with face-to-face education. In this study, in which distance education was considered within the framework of the independence theory, it was revealed that prospective preschool teachers perceive the teaching process more freely and independently, they can organize according to their own learning styles and pace, their workload is arranged according to their own working speed, and they expect changes in the learning process to increase efficiency in distance education. It has been determined that the prospective preschool teachers think that they will use distance learning more in their professional lives in the future and therefore they need to improve themselves more in using technology for teaching purposes. These results show that students in distance education assume more responsibility, are active in planning learning processes and prefer independence in achieving their goals. In addition, it was determined that they intend to improve themselves with the training they will receive from different platforms during the distance education process. It is thought that revealing the effective and incomplete aspects of the distance education process, which has been put into practice, will contribute to the correct evaluation of both the teaching process and the prospective teachers, and to determine the progress made.

RECOMMENDATIONS

Distance education system can be made more productive and tangible by increasing teacher-student interaction, and, moreover, access can be made available for all students by providing the necessary infrastructure service for online learning. To prevent prospective teachers from feeling distanced and disconnected in the distance learning process, they can be made to feel part of a group by involving them in extracurricular activities in which social networking is carried out. In an education system in which there is a learner-centred approach rather than a teacher-centred one, the learner bears responsibility for his/her own learning, and equality of opportunity in education is provided, prospective teachers' education processes can be accomplished in line with technological developments and new needs that will emerge in the future. Distance education can be used effectively for developing new competences and skills in a professional sense by cooperation with the relevant stakeholders in order to prepare prospective teachers for their future professional lives in possession of the required knowledge and skills. At the same time, different studies can be conducted to reveal the effectiveness and limitations of distance education. This research was limited to the teaching process and students. In future studies, the learning environment and learning materials can also be examined within the scope of the research and their effectiveness can be investigated.

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