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OPINIONS OF TEACHERS ON PROFESSIONAL LOSS AND GAINS DURING THE PANDEMIC

Abstract: This study aims to evaluate the professional losses and gains of teachers who continue their teaching activities within the scope of emergency distance education during the pandemic. The study was carried out as phenomenological research, one of the qualitative research methods. The purposeful sampling method was used to determine the research sample, one of the non-random sampling methods. The research sample consists of 57 teachers who work in Afyonkarahisar city centre between 2022- 2023. The data were collected with "Semi-Structured Interview Forms" prepared by the researchers and analysied through descriptive analysis, one of the qualitative data analysis methods. The findings show that the participants have some losses and gains in the cognitive development area, while they mostly have professional losses in the affective area. In this process, some teachers stated that they have losses regarding social development, while others emphasized that they have gains. In addition, the teachers stated that they have experienced some losses in their professional field knowledge, the methods and techniques they used in the learning environment, and the methods and techniques they used in the measurement-evaluation process. Finally, the participants stated that their technology and digital literacy skills have increased significantly during the pandemic. This shows that there are positive and negative changes in the professional skills and proficiency levels of teachers during the pandemic. As a result of the study, the studies to be carried out on the subject can be deepened by considering the teachers' areas of expertise separately.

Keywords: pandemic, teacher, professional loss, professional gain.

Introduction

The epidemic, which emerged in Wuhan, China's Hubei province, in December 2019, has spread worldwide. Around 1.6 billion students worldwide have been affected by this education disruption. According to UNICEF (2021), 214 million children have missed more than three-quarters of their face-to-face learning. The first coronavirus case in our country was seen on March 11, 2020. As a precaution against this, various measures have been taken in education, as in every field in our country. In light of the measures taken, Turkiye Ministry of National Education [MEB] and Turkiye Presidency of the Higher Education Institution [YOK] suspended formal education. They started giving all the training online (Telli & Altun, 2020). As of March 23, 2020, it has been decided that education will be carried out over the Internet with the Educational Information Network (EBA) and on television with the Turkish Radio and

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Television Corporation [TRT]. Thanks to these applications, students listened to their lectures on EBA TV on the one hand. They followed the content related to the subjects they studied on EBA, on the other hand, and had the opportunity to see all the content sent by their teachers. Again, students had the opportunity to learn in a digital environment with their teachers through the EBA live classroom application (Dasdemir & Cengiz, 2022). Teachers also continued their lessons through EBA and tried contributing to their learning by preparing digital or non-digital materials for students.

It is seen that both students and teachers are affected by this situation in countries that have started to continue education in a short time thanks to emergency distance education plans. According to the data obtained by the Global Education Cluster (GEC, 2021) from 27 countries that have become the four critical centres of the COVID-19 pandemic around the world, four million classroom teachers and 147 million primary school students have been affected by the pandemic. When UNICEF (2021) and GEC (2021) data are interpreted, nearly half of the children deprived of education throughout the world during the pandemic are at primary school age. Of course, this situation is not limited to classroom teachers and primary school students only. From primary school to higher education, students and teachers at almost all levels have been affected by this situation. It is estimated that a 6-month school closure due to the pandemic typically coincides with 2 or 3 summer holidays. If the learning loss is calculated, it can be seen that the learning losses among learners may exceed the threshold level (Aurini & Davies, 2021). These learning losses should not be evaluated only in terms of students. However, some gains and losses of teachers who experience the process directly, both from their professional and teaching skills, should be carefully considered. As Kuhfield and Tarasawa (2020) state that it is not possible to know in a short time how practical the K12 level distance education applications in the pandemic are for both learners and teachers.

Due to this global pandemic that has quickly surrounded the world, countries have implemented mandatory quarantine, affecting students and teachers differently. In particular, teachers who had to spend more time at home had to carry out their jobs from their homes over time. It has been decided that the teaching profession, one of the most important professions, will be carried out with emergency distance education programs throughout the current process. Emergency distance education carried out through many different platforms over virtual networks, involves teachers trying to explain their lessons from home in front of a phone, computer or tablet in an audio and visual way. Teachers, who did not leave their homes while all these practices were going on, and were also exposed to quarantine and restriction practices, faced many difficulties.

Teachers have started to spend almost all their time at home, which has undoubtedly increased the use of technology and media communication tools. Along with all these factors, this situation has brought the obligation of "home office" working. Factors can be considered the advantages and disadvantages of the home office working method used during the pandemic (Koparan & Bekalp, 2020). At this point, teachers had to support the learning and well-being of their students with different methods and tools within the scope of distance education, apart from the face-to-face communication they are professionally accustomed to. On the other hand, they had to cope with the social and psychological difficulties caused by the epidemic in their own lives.

Many teachers, who only had online distance education experience during the pandemic and needed adequate training on dealing with such a crisis in preservice and in-service training processes, needed to be prepared for this process. In many countries, teachers were expected to take the initiative and carry out this process independently, and teachers needed more support. Teachers with limited competence and skills to provide emergency distance education have faced difficulties in carrying out this process effectively. It is also known that there are significant differences among teachers in terms of their ability to access and use digital tools in Turkey and many countries. For example, it is seen in the studies of Boyaci (2019) and Alhazza and Lucking (2017) that female teacher candidates are better digitally literate than males. There are also research results showing that male teacher candidates have better digital literacy levels than female teachers (Ata & Yildirim, 2019; Ozerbas & Kuralbayeva, 2018; Yontar, 2019;

Zhou, 2014). In their study, Kapcak and Sakiz (2022) concluded that age, gender and professional seniority variables play a role in closely following the technological development of teachers while performing their profession. In addition to the differences between teachers, the school's resources, students' access to and proficiency in using digital tools, the socioeconomic profile of the school and the students significantly affect how teachers spend the distance education process (OECD, 2020). Kingsley (2010) states that teachers need a guide on applying critical approaches that fit the culture of schools and that it is necessary for both students and teachers to integrate technology into the course content. Krumsvik and Almas (2007) studied how teachers working in Norway's top schools adopt digital technologies in their personal development. The teachers participating in the interview are aware of the situation of their colleagues. Therefore, their recommendation for competence development is that all teachers should have laptop computers, provide learning organization among teachers, learn a piece of new knowledge or get help from their colleagues in unsuccessful attempts.

Therefore, teachers have carried out emergency distance education activities during the pandemic and faced many complex tasks. Teachers, who work with great self-confidence and complete dedication, have tried to keep up with the methods they are not accustomed to professionally and to close the gaps in their students with technological tools. On the other hand, teachers struggling with the psychological and social problems brought on by the epidemic also tried to get their students out of this period with minor damage. For example, according to a study conducted in Germany, it is noteworthy that teachers' workload increased by 61% after the pandemic. Teachers' overburdened duties include doing research (52%), organizing study groups at home and school (42%), students' needs at different times of the day (41%), and use of digital tools (30%) (GEC, 2021). This situation shows teachers must work on many subjects in different fields during the pandemic. In the literature, it is seen that most of the studies carried out, especially during the pandemic process, focus on students, students' learning losses, and students' digital literacy skills (Kaffenberger, 2021; Middleton, 2020). However, most of the studies focus on the negative aspects of the pandemic and emergency distance education practices (Gorgulu Ari & Kanatsiz, 2020; Hall, 2020; Sari & Nayir, 2020). However, instead of looking at the situation only from the negative aspects, it is thought that it is essential to look at the benefit of the individuals in this process. In this context, this study aims to evaluate the professional losses and gains of teachers who continue their teaching activities within the scope of emergency distance education during the pandemic. For this purpose, answers to the following questions are sought. Continuing education activities during the pandemic period;

- 1- What are the teachers' opinions about their professional losses and gains in cognitive, affective and social development areas?
- 2- What are teachers' opinions about the professional losses and gains they have experienced in the field of knowledge?
- 3- What are the teacher's views on the professional losses and gains they experience in teaching methodology?
- 4- What are the teacher's views on the professional losses and gains they experience in technology and digital literacy skills?

Method

Method of Research

This study, which deals with the professional losses and gains of teachers working within the scope of emergency distance education activities during the pandemic, was conducted as phenomenological research from qualitative research methods. In many unknown cases, starting with qualitative research methods often makes the research more qualified (Patton & Cochran, 2002). Designing the research as qualitative research will increase the quality of the study because teachers who work from home during the pandemic have to deal with many tasks in the same way, except for teaching activities, and due to individual differences that may arise in this case. Because phenomenological studies are a research method that deals with what people perceive, understand and experience about the phenomena they

encounter in the universe they live in (Yildiz, Cekmez, & Butuner, 2012). This study aims to reveal the experiences of teachers in this process. For this reason, this study was conducted as phenomenological research.

Participants

The purposeful sampling method used to determine the research sample, one of the non-random sampling methods. The aim here is to select information-rich situations in order to conduct in-depth research (Buyukozturk, 2012). The research sample consists of 57 teachers who worked in Afyonkarahisar city centre between 2022- 2023 and a master's degree student in Afyonkarahisar Kocatepe University, Faculty of Education, Department of Curriculum and Instruction. This sample group continued its emergency distance education activities on online platforms during the pandemic and also attended or completed the master's program. The fact that participant teachers have started their master's program after the pandemic can be considered an important parameter to evaluate their professional losses and gains. The fact that the participants continued their teaching activities and learning processes after the pandemic was influential in determining the research sample. Other data on the participants are in Table 1 below:

Table 1. Data on Participants

	Variables	N	%
Gender	Female	34	59,6
	Male	23	40,4
Instructor Level	Preschool	10	17,54
	Primary school	12	21,05
	Secondary school	24	42,10
	High school	11	19,29
Professional Seniority	1-5	6	10,52
	6-10	22	38,59
	11-15	14	24,56
	16-20	6	10,52
	21 and above	9	15,78
Educational Status	Undergraduate	50	87,71
	Master Bachelor	7	12,28
	Science	3	5,26
	Turkish	6	10,52
	English	8	14,03
	Class	8	14,03
	Preschool	9	15,78
	Religion	2	3,50
Branch	History	1	1,75
	Art	1	1,75
	Chemistry	1	1,75
	Mathematics	1	1,75
	Physical Education	2	3,50
	Social Sciences	3	5,26
	Information and Communication Technologies	1	1,75
	Other	11	19,29

Looking at Table 1, 34 (59,6%) of the 57 participants are female, and 23 (40,4%) are male. Majority of the teachers (42,10%) work in a secondary school, while 10 (17,54%) work in a kindergarten, 12 (21,05%) in primary school and 11 (19,29%) in a high-school level school. It is seen that the majority of the teachers (38,59%) have professional seniority between 6-10 years. Again, 7 of the participants (12,28%) completed the master's program. The remaining teachers (87,71%) continue their education in the master's program. Finally, when the branches of the teachers are examined, it is seen that they are from science, Turkish, English, classroom, preschool, religious culture and ethics, history, painting, chemistry,

mathematics, physical education, social studies and computer branches. 11 of the teachers (19,29%) work in branches other than the ones mentioned.

Data Collection Tools

Research data were collected with "Semi-Structured Interview Forms" prepared by the researchers. In the creation of the form, firstly, the relevant field was scanned, and the themes that would form the basis for the emergence of professional losses and gains of teachers were determined. Then, sub-themes (categories) that will provide in-depth data on the relevant themes were determined, and many openended questions were created regarding these sub-themes. Two Literature Teachers made necessary corrections to ensure the structural validity of the questions and to check their suitability in terms of language expression. Two field experts from Afyon Kocatepe University made revisions to examine the relationship between the themes and sub-themes in the form and the questions, in other words, to ensure content validity. In line with the opinions obtained, necessary corrections were made in the semi-structured interview form and it was made ready for pre-application. As a result of the preliminary application, necessary changes were made, and the interview form was given its final form. The prepared form comprises "Personal Information" and "Interview Questions". The questions consist of 8 questions related to a total of 7 sub-themes belonging to four main themes. The stages followed during the development of the data collection tool, the table consisting of theme, sub-theme, and questions are given below:

Table 2. Formation of Interview Questions

Themes	Sub-themes	Interview Questions
Development Areas	Cognitive losses and gains	1- Please evaluate and explain your losses and gains regarding your current level of knowledge during the pandemic. What precautions did you take for possible losses?
	Affective losses and gains	2- What kind of losses and gains did you have regarding your emotional state during the pandemic? What precautions have you taken regarding these? What were the challenging situations you encountered in learning environments, and what were your solutions?
	Social losses and gains	3- What kind of losses and gains did you have regarding your social situation during the pandemic? What precautions have you taken regarding these? What were the challenging situations you encountered in learning environments, and what were your solutions?
Field Knowledge	Losses and gains related to the branch of teaching	 1- What did you do to improve yourself professionally during the pandemic? 2- What kind of losses did you have in your branch during the pandemic?
Methodology	Losses and gains related to the methods and techniques used in teaching	1- What changes occurred in the methods and techniques you use in learning environments during the pandemic? How has your current teaching method been affected by this situation?
	Losses and gains related to the methods and techniques used in measurement-evaluation	1- What kind of losses and gains did you have in the measurement-evaluation techniques you preferred during the pandemic?
Technology- digital Literacy	Losses and gains regarding the use of technology and digital materials	1- How would you evaluate your use of technology and digital tools during the pandemic? Have you experienced any change in your general technology knowledge?

Data Collection

After the data collection tool was prepared, a pilot interview was conducted with two participants to ensure the validity and reliability of the questions, and the interview form was finalized. The same questions were asked to the participants in the study sample group to ensure the validity of the research (Yildirim & Simsek, 2013). Before starting the data collection process, the participants who would participate in the research were determined voluntarily. Interviews were conducted in online environments, with an average of 10-15 minutes with each participant separately. The researchers recorded the data obtained during the interview in written and audio form. After the data was written down, the participants were allowed to check for confirmation.

Data Analysis

Since the data were collected through qualitative data collection tools, the data collection tool used descriptive analysis which is one of the qualitative data analysis methods. Since the purpose of descriptive analysis is to summarize the event as it is, quotations are also included (Yildirim & Simsek, 2013). In analyzing the data, the participants were first coded as P1, P2, ... P57. The expressions of the participants in the interview forms were coded according to the contents of the themes and sub-themes. Frequencies were determined according to the repetition frequency of the coded expressions. In addition, sample expressions from the participants' views are included to facilitate the clearance of the questions in the themes and sub-themes.

Validity and Reliability

Guba and Lincoln (1982) stated that expressions such as plausibility, reliability, confirmability and transferability in qualitative research should replace the expressions of validity and reliability used in quantitative research. It is appropriate to specify one or more of these strategies to check the accuracy of the findings of a study (Creswell, 2003). There are many ways to increase credibility. These are prolonged interaction, participant confirmation, and expert review (Holloway & Wheeler, 1996). This study tried to ensure credibility by establishing long-term interactions with the participants during the graduate courses, conducting direct interviews with the participants, and taking the researchers' opinions. In the study, more than one researcher was involved in the data collection, analysis and interpretation, and researcher diversity was used. In this context, each data obtained was coded by three researchers, a consensus was reached on the codes reached, and tabulated by placing them in appropriate themes.

Findings

In this part of the research, the codes obtained after the descriptive analysis of the data obtained from the interviews and their frequency values are presented in tables, and sample expressions from the participant's views are included. The data regarding the first sub-problem of the research, "What are the teachers' opinions on their professional losses and gains in cognitive, affective and social development areas?" are given below.

Table 3. Loss and Gains in Cognitive, Affective and Social Development Areas

Theme	Sub-theme	Code	Frequency
	Cognitive losses and	Increase in knowledge level	10
		Decrease in knowledge level	22
	gains	No change in knowledge level	25
		No emotional problems	3
	Affective losses and gains	Experience anxiety	14
		Experience a loss of motivation	13
		Feel lonely	7

Development		Experience stress	7
Areas		Experience fatigue	5
		Experience anger	4
		Experience uncertainty	4
		Loneliness	25
		Lack of communication	24
		Lack of sharing	17
	Social losses and gains	Inability to cooperate	14
	Social losses and gains	Alienation	11
		Teacher-parent cooperation development	16
		The development of strong family ties	16
		The development of online friendships	12

According to Table 3, three codes regarding the cognitive losses and gains of the participants were obtained. While 10 participants stated that their level of knowledge increased, 22 stated that their level of knowledge decreased, and 25 stated that there was no change in their level of knowledge. Sample expressions from the participants' views on the gains and losses they experienced in cognitive development are given below.

"I realized that I forgot some finger tricks, nursery rhymes and songs that we repeated every day in school or that I remembered as the topics came up. Looking at my notebook, I remembered that I rarely opened my notebook before the pandemic." (P2)

"I have not experienced a loss as my online working and education life continues. On the contrary, as I am not limited spatially and my time spent in traffic is minimal, my daily cognitive activity time has increased. On the other hand, this brought my access to information and increased the volume of information I have obtained as a natural result." (P16)

"I had a lack of foreign language practice because it was not used." (P21)

"There has been a pandemic for about two years, which means a long time in education. At first, it caused losses in terms of motivation, energy and willingness. Many of us lost relatives due to this disease and had to continue our education life with a bad psychology. If I take it from my point of view, coldness intervened and I encountered situations such as information atrophy. I also forget the things we know to do."(P26)

"I think I spent the pandemic process quite productively. In this process, I received training on subjects related to my field with the spread of distance education. By adopting the eTwinning project I run to the pandemic conditions, I have made it very useful for myself and my children." (P37)

"My digital skills have improved. I learned to use different applications like ZOOM and Google Forms. In addition, it was necessary to use the board in live lessons, I solved this problem with a graphic tablet. I used different methods and techniques; I used web 2.0 tools more consciously and actively. I had the opportunity to research and use foreign language platforms in order to improve myself. I participated in 56 distance education activities and learned a lot and even decided to start my master's degree in this process." (P45)

Eight codes emerged in the second sub-theme "affective losses and gains", which was handled within the scope of the first sub-problem of the study. While very few of the participants (f=3) stated that they did not have an emotional problem, the other participants had anxiety (f=14), loss of motivation (f=13), loneliness (f=7), stress (f=7), fatigue (f=5), anger (f=4) and affective problems such as uncertainty (f=4). Sample expressions from the opinions of the participants are given below.

"I was emotionally exhausted during this period. The perception that teachers do nothing, especially with the transition of schools to distance education in social media, and the fact that this subject has become humorous, has degraded the profession's reputation. Even though we did not go to school, I was very tired of live lessons, online meetings, constant preparation in front of the computer, and spending a long time in front of the screen. Trying to reach students and parents alike, and the fact that teachers are the only culprit and responsible for the negativities experienced made me very sad." (P19)

"Emotional states such as loneliness, fear and anger occurred. I was alone, but I made use of it by reading a book. Also, I did not have any problems because it was distance education." (P20)

"Like many people, I lost motivation towards life. This reduced the teaching efficiency." (P31)

The third sub-theme covered within the scope of the first sub-problem of the research was social losses and gains. There are eight codes in total under this sub-theme. Five of these codes fall under the category of social losses, and these are loneliness (f=25), lack of communication (f=24), lack of sharing (f=17), inability to cooperate (f=14) and alienation (f=11). In the category of social gains, there were three codes. These are teacher-parent collaboration (f=16), strong family ties (f=16) and online friendships (f=12). Sample expressions from the opinions of the participants are given below:

"It was comforting to be side by side with my children and my mother during this process. I spent longer productive times with them. I was more interested in their lessons, development, and feelings." (P41)

"Loneliness for sure. We could not meet friends, we could not meet families. I was usually at home." (P47) "My use of social media on the Internet has increased as well, but when I say social status, I think of going somewhere to have tea and coffee with my friends or chatting in the teachers' room when the lesson is over. These were all losses." (P54)

"Social relations (friendship, kinship, neighbourliness, etc.) weakened. Everyone retreated into their shells." (P57)

The second sub-problem of the research was expressed as what are the opinions of the teachers about the professional losses and gains they experienced in the field knowledge. The findings related to this are given in Table 4:

Table 4. Loss and Gains Related to Content Knowledge

Theme	Sub-theme		Code	Frequency
		No loss		25
		Loss of field knowledge	Forgetting the details of the subjects	13
			Forgetting hands-on activities	10
			Having problems with classroom	0
Losses and gains Field related to the Knowledge branch of teaching			management	9
		Gains of field knowledge	Learning to use Web 2.0 tools	35
	teaching		Learning to prepare an online activities	24
			Learning to integrate technology into the lesson	23
			Participate in in-service training	13

According to Table 4, the participants talked about their field knowledge losses and their gains regarding their branches. Four codes emerged regarding the losses in domain knowledge. While most of the participants (f=25) stated that they did not experience any loss in their field knowledge, some of them stated that they needed to remember the details of the subjects they explained in the face-to-face training. Again, while 10 participants emphasized that they needed to remember hands-on activities, nine said they started having classroom management problems. In the category of acquisitions related to content knowledge, four codes emerged. These are learning to use Web 2.0 tools (f=35), learning to prepare online activities (f=24), learning to integrate technology into the lesson (f=23), and finally, participating in in-service training (f=13). Sample expressions from the opinions of the participants are given below.

[&]quot;Professionally, not much was lost.." (P12)

[&]quot;Despite applications such as phet-colorado, EBA animation and sanlab, many subjects caused difficulties in explaining and explaining due to the inability to experiment. There was no application step." (P16)

[&]quot;Not being able to teach face-to-face prevented us from getting to know our students well enough. There were deficiencies in our duties and work. For example, excursions were not carried out. This was a serious deficiency in terms of consolidation of learning." (P29)

"I attended distance training, seminars and webinars. I prepared for ALES in terms of my professional and personal development. I am doing my master's degree in the Department of Curriculum and Instruction at Afyon Kocatepe University." (P34)

"I followed eTwinning, online seminar, European supported education programs online. It has given me many benefits professionally." (P40)

"I used Web 2.0 tools more, I gave more weight to computer-assisted and individual studies. I have always sought answers to how to be more useful to children professionally by using different methods and techniques. I improved my deficiencies by meeting with friends in the same profession and exchanging information." (P51)

The third sub-problem of the research was determined as what teachers' opinions are about the professional losses and gains they experience in teaching methodology. Table 5 shows the codes obtained for this sub-problem.

Table 5. Losses and Gains of Professional Methodology

Themes	Sub-themes	Code	Frequency	
Methodology	Losses and gains related to the methods and techniques used in teaching	No loss	8 28 21 35 34 26 26 23	
		Using the lecture method	28	
	and teaminges used in teaching	Use of Web 2.0 tools	21	
		Poor assessments and evaluation		
	Losses and gains related to the methods	unreliable assessment and evaluation	34	
		Product-oriented assessment	26	
	and techniques used in measurement-	Overuse of multiple-choice tests	s 26	
	evaluation	Inability to perform applied assessment and evaluation		
		Alternative assessment and evaluation, such as project and performance		

Table 5 shows the codes related to the methods and techniques used by teachers in distance education learning environments during the pandemic and the methods and techniques they used during measurement-evaluation. In the category of losses and gains related to the methods and techniques used in teaching, three codes emerged as "no loss (f=8), using the lecture method (f=28) and using web 2.0 tools (f=21)". Examples of teacher opinions regarding these codes are given below:

[&]quot;I could only give lecture. Being away from the active learning environment limited my hand in terms of methods and techniques." (P33)

[&]quot;I could not use the techniques I applied in creative writing studies. For example, we could not do group work activities. I could not get drama work done. I avoided speaking activities requiring students to speak for a long time." (P36)

[&]quot;I had to give lecture." (P42)

[&]quot;More presentation methods were used. I could not actively involve students online." (P48)

[&]quot;Group work could not be done. We could not make any observations. We used other methods whenever possible. We tried to use e-twinning activities and methods in our lessons." (P50)

[&]quot;But we learned many techniques online. I gave lectures with Google classroom, padlet, EBA, YouTube videos. Using many new web 2.0 tools and assigning assignments to my students." (P52)

[&]quot;During the pandemic, I met the philosophy for P4C Children. This has been a big win for me. I started to use Web 2.0 tools more effectively. Suitable for the age and development level of my students" (K56)

The second sub-theme related to the third sub-problem of the research is the losses and gains related to the methods and techniques used in measuremen-evaluation. A total of six codes emerged in this sub-theme. These; poor assessment and evaluation (f=35), unreliable assessment and evaluation (f=34), product-oriented assessment (f=26), overuse of multiple-choice tests (f=26), inability to perform applied assessment and evaluation (f=23) and using alternative assessment and evaluation such as project and performance (f=12). Below are sample expressions from the opinions of the participants.

"Of course, measurement and evaluation could not be done healthily. Question and answer or EBA tests etc., with the students participating in the course in the form of process evaluation. I applied it, but the participation rates were meagre." (P6)

"Assessment and evaluation techniques were only lecture-oriented. It was impossible to go beyond the measurement and evaluation at the course's end. Face-to-face and online training decisions, non-compulsory participation, and lack of continuity in class participation adversely affected assessment and evaluation." (P11)

"During the pandemic, I could only use online tests, quizzes, questions and answers, and unfortunately, I think that most of them did not give real results." (P20)

"In order to be able to evaluate the process, I tried to do online exams on the day of each lesson. However, the process evaluation did not work properly. After the ministry announced class passing and exam regulations, class attendance decreased." (P36)

The fourth sub-problem of the study was determined as what teachers' opinions are about the professional losses and gains they experience in technology and digital literacy skills. Table 6 includes the themes, codes and frequencies related to this sub-problem.

Table 6. Losses and Gains Regarding Technology and Digital Literacy

Theme	Sub-theme	Code	Frequency
Literacy the L		More use of technological and digital tools	45
	Losses and gains regarding the use of technology and	Increase in knowledge of technological issues	44
	digital materials	Increase in ability to use online applications	41
		Preparing digital content	39

Table 6 shows four codes related to technology and teachers' digital literacy during the pandemic. These were determined as more use of technology and digital tools (f=45), increase in knowledge of technological issues (f=44), Increase in ability to use online applications (f=41), and Preparing digital content (f=39). Sample expressions from the participants' views on these codes are given below:

"The transition to distance education during the pandemic necessitated the use of web 2.0 tools. Our knowledge of using existing technology has increased." (P3)

"Since I was exposed to more technology during this period, I had to develop myself in this field. I learned to implement new programs." (P18)

"While I was confident in using technology, I realized that I was inadequate in this regard. I realized that with online applications, I could prepare unique content for me and measure and evaluate." (P27)

"I started to give more importance to technology, I started to recognize digital programs, I had no loss." (P33)

"My perspective on technology has been updated. I think I spend more time with technological devices and learn new things. I learned about new programs, e-learning environments, e-contents, and e-books. We experienced the education-technology relationship alive and progressed. I do not think I'm lost." (P50)

"I have had gains. Digital games, digital stories, etc. to attract students' attention. I have made progress. I received much training and designed digital games." (P51)

Discussion

This part of the study, which aims to evaluate the professional losses and gains of teachers who continue their teaching activities within the scope of emergency distance education during the pandemic, aims to discuss the findings and present the results.

In the first sub-problem of the study, what kind of losses and gains teachers have in cognitive, affective and social development during the pandemic process is discussed. First of all, it is seen that while a few of the teachers stated that there was an increase in their knowledge level, most of them stated that they experienced a decrease in their knowledge level or did not experience any changes. This situation may be because most of the teachers do not participate in activities that contribute to their knowledge levels during the pandemic. It also comes to mind that teachers may need help participating in activities that will increase their knowledge levels due to getting used to online learning environments and home-office applications.

Regarding the affective losses and gains in the second sub-theme related to the first sub-problem, only a few teachers stated they did not experience an emotional loss. This can be interpreted as teachers managing their affective situations well during the pandemic process and ignoring or suppressing some emotions because most teachers have experienced various affective problems during the pandemic. While most of the teachers experienced situations such as anxiety and loss of motivation, some of them felt lonely and under stress. In this regard, Kaya (2020) emphasizes that with the onset of the epidemic, psychological effects such as intense anxiety began to be seen in individuals, apart from some physiological outcomes such as the change in lifestyle, the feeling of uncertainty, and the risk of transmission of the disease. In addition, in the study in which teachers working during the epidemic shared their experiences, sources of stress were frequently mentioned, and it was shared that burnout symptoms increased among teachers. This study also shows that teachers experience fatigue, anger and uncertainty about some situations. This indicates that teachers experience more losses, especially in the affective domain. When the research conducted by Dayal and Tiko (2020) is examined, it is found that preschool teachers have various concerns during the Covid-19 pandemic. Teachers, who had to adapt to new practices related to distance education, started to experience stress and problems in the face of this new situation. Some teachers were unfamiliar with the practices and concerned about providing adequate support to students; some teachers also experienced financial concerns with the possibility of unemployment (Sahin, 2021). Cicek, Tanhan, and Tanriverdi (2020) concluded that psychological inflexibility, depression, and anxiety increased among single and young teachers and female teachers.

The last sub-theme related to the first sub-problem was teachers' losses and gains in social development. Teachers stated that they felt lonely in social development, could not communicate properly with anyone, and did not share anything. It is also seen that some of the teachers emphasize that it is challenging to establish professional cooperation in distance learning environments. Teachers consider themselves to be alienated from the social environment. Similar to this result, Sari and Nayir (2020), in their review of three reports on education prepared by UNESCO, the World Bank, and Reimers and Schleicher after the Covid19 pandemic, found that teachers and parents were caught unprepared for distance education caused by the pandemic worldwide and that the difficulties in maintaining distance education They stated that it was experienced and caused isolation from society. Epidemics are problems that threaten people's lives, leave physiological and psychological effects, reduce the quality of life and wear out society (Erkal, 2021). However, in the study, some teachers emphasize their social gains and state that they have experienced losses, especially in social development. For example, they stated that in face-to-face learning environments, teacher-parent cooperation, which they had difficulty establishing, was provided more effectively in distance learning environments. It is thought that this may be because both teachers and parents have made all communication channels open during the pandemic. Communication groups established, especially in online environments and online parent meetings, contributed to the participation of many parents. Again, teachers stated that they established strong family ties and contributed to their social development through online friendships, especially during the pandemic.

The second sub-problem of the research is related to the losses and gains of the teachers' field knowledge that they have experienced during the pandemic. In this context, almost half of the teachers stated they had no loss in their field knowledge. This study was carried out, especially after a certain period has passed since the pandemic. When teachers switched to face-to-face education again, they were able to make a much more rational assessment of the change in their content knowledge. However, the fact that the teachers stated that they did not experience a change in their field knowledge may also be because they did not exhibit an objective point of view regarding their current situation. Some teachers stated that they forgot the details of some subjects specific to their branches during the pandemic. The fact that the subjects are handled superficially in online learning environments and mainly using the direct lecture method may have caused this situation. Again, some teachers stated that they had problems forgetting practical activities. The fact that online learning environments are not suitable for hands-on activities has caused teachers to be unable to practice for a long time. Losses experienced here can be associated with this. Some teachers also stated that they had problems with classroom management in online environments. The rapid transition of teachers to distance education within the scope of emergency distance education caused them to be caught unprepared at some points. Teachers with no classroom management problems in face-to-face learning environments have encountered such problems in online environments. Kirmizigul (2020) also reached similar results in her study and stated that with the transition to distance education, some changes were experienced in the fields of communication with students, interaction, course management and strategy. It is also possible to talk about the achievements of teachers regarding content knowledge. Most teachers emphasized that they learned to use Web 2.0 tools during the pandemic. Despite the regulations to encourage using such tools, in-service training and technological transformations in the classrooms before the pandemic, teachers' learning to use these tools and their level of use was not at the desired level. However, the fact that teachers see this as a need, especially during the pandemic period, has enabled them to enrich their field knowledge. In the study conducted by Sakiz (2022), it was concluded that the teachers who switched to distance education immediately after the closure of the schools due to the pandemic started to use alternative teaching methods.

With the third sub-problem of the research, the methods and techniques used by the teachers in teaching during the pandemic and the losses and gains of the methods and techniques they used in assessment and evaluation were discussed. Very few teachers stated that they did not have any losses in terms of the methods and techniques used in teaching. Most of the teachers stated that they preferred the direct lecture method. This may be because teachers need to learn how to transfer their current methods and techniques to the online environment within the scope of emergency distance education. In addition, the fact that students want to refrain from activating their cameras or microphones may have forced teachers to use this technique. Again, some of the teachers emphasized that they use web 2.0 tools in their lessons. This shows that teachers are attempting to integrate technology into their lessons and improve their technological skills. According to Sahin (2021), teachers had to use different tools, materials and applications in the distance education process compared to the regular education period. For teachers who are not competent in these subjects, it has become much more challenging to ensure the participation and motivation of students, to support and follow students from a distance, and this has increased the pressure on teachers (Sahin, 2021). Considering the losses and gains of the teachers in terms of the methods and techniques used in assessment and evaluation, it is noteworthy that most of them believe that a good assessment and evaluation is not made. This may be due to the high tendency of teachers to use standard assessment and evaluation tools in assessment and evaluation. Some teachers stated that reliable results were not obtained in measurement and evaluation. This may also be due to the tendency of teachers to use only standard assessment and evaluation tools such as open-ended questions, classical exams or multiple-choice tests. Again, for the same reasons, the teachers stated that they only used product-oriented dying assessment methods from the emergency distance education process and that multiple-choice tests were preferred. Few teachers emphasized alternative assessment and evaluation methods and techniques such as projects and performance. The views expressed here can be interpreted as teachers generally preserving and maintaining their existing assessment and evaluation methods and techniques. Because it is noteworthy that teachers do not attempt to use a new method and technique specific to this process.

In the fourth sub-problem of the research, the losses and gains of teachers in technology and digital literacy skills were discussed. In this regard, a large part of the teachers stated that they started to use technological and digital tools more than usual. This shows that teachers are attempting to integrate technology into their lessons. While teachers stated that there was a significant increase in their ability to use online applications, many teachers emphasized that they started to prepare digital content. This can be interpreted as teachers increasing technology and digital literacy skills. Kaleli (2021) stated that some teachers needed help regarding distance education and the technological and pedagogical readiness required by this education method. Teachers have had to learn new virtual teaching pedagogy and platforms, and teachers have become the first resource for parents using instructional technology (Ferguson, Frost, & Hall, 2012). This necessity has provided teachers with gains in digital and technological competence. As a matter of fact, in the study conducted by Cicek, Tanhan and Tanriverdi (2020), it was emphasized that together with the pandemic, teachers used social media and the Internet more and that teachers displayed positive thoughts about the distance education system. Again, Kirmizigul (2020) stated that teachers' knowledge and experience in technological and pedagogical fields improved in the process. As a result of the study conducted by Yildiz and Dogan (2021), it was stated that the stakeholders had essential issues such as distance education is advantageous, there is no time and place limit, access to course repetitions, meeting the educational needs during the pandemic period, reducing the risk of disease transmission, the importance of technology in education and improving technological skills.

Conclusion

As a result, their teachers have experienced some professional losses and gained some gains during the pandemic process. It is crucial for teachers going through a rapid transition period within the scope of emergency distance education to seek to improve themselves in cognitive and social development. Even if most teachers encountered various emotional problems, they sought ways to combat them. Teachers have lost their field knowledge from the long-distance education process. However, some teachers attempted to turn the threats they encountered into opportunities and included innovative practices that could expand their field knowledge. The Covid-19 epidemic has affected people's social lives, professional situations and individual lives, and the epidemic has had wide-ranging effects that require redesigning these elements (Ahmadi, 2020). In addition, teachers have made an effort and attempted to use technology and digital content, especially in their lessons. This situation can be counted among the professional gains of teachers during the pandemic process. In possible future studies, it can be discussed how to compensate for the professional losses experienced by teachers by making evaluations on the dimensions. In addition, in-service training activities can be organized on how teachers should proceed in processes that require emergencies such as pandemics. In addition, it is crucial to discuss and develop distance education more effectively in situations such as earthquakes, pandemics, etc., that can be encountered at any time. In this respect, studies can be conducted to develop new teaching methods, techniques, and technological education applications to make distance education more effective in future emergencies or the ordinary process.

References:

Alhazza, T. C., & Lucking, R. (2017). An examination of preservice teachers' view of multiliteracies: Habits. Reading Improvement, 54(1), 32-43.

Ahmadi, R. (2020). Koronavirus pandemisinin (Covid-19) toplumsal etkileri. *Bilim Armonisi Dergisi*, 3(2), 65-72. https://doi.org/10.37215/bilar.800484

- Ata, R., & Yildirim, K. (2019). Exploring Turkish preservice teachers' perceptions and views of digital literacy. Education Sciences, 9(1), 40. doi:https://doi.org/10.3390/educsci9010040
- Aurini, J., & Davies, S. (2021). COVID-19 school closures and educational achievement gaps in Canada: Lessons from Ontario summer learning research. *Canadian Review of Sociology*, 58(2), 165-185. https://doi.org/10.1111/cars.12334
- Boyaci, Z. (2019). Ogretmen Adaylarinin Yasam Boyu Ogrenme Egilimleri Ile Dijital Okuryazarlik Duzeyleri Arasindaki Iliski (Duzce Universitesi Ornegi). Yuksek Lisans Tezi. Sakarya: Sakarya Universitesi, Egitim Bilimleri Enstitusu.
- Buyukozturk, S. (2012). Sosyal bilimler icin veri analizi el kitabi. Ankara: Pegem Akademi Yayincilik.
- Creswell, J. W. (2003). Research design: qualitative, quantitative and mixed methods approaches. California: Sage Publications.
- Cicek, I., Tanhan, A., & Tanriverdi, S. (2020). COVID-19 ve egitim. Milli Egitim Dergisi, 49(1), 1091-1104.
- Dasdemir, I., & Cengiz, E. (2022). Ortaokul ogretmenlerinin Turkiye'de salgin surecinde yapilan uzaktan egitime iliskin gorusleri. *Milli Egitim Dergisi*, 51(233), 327-351. DOI: 10.37669/milliegitim.787563
- Dayal, H. C., & Tiko, L. (2020). When are we going to have the real school? A case study of early childhood education and care teachers' experiences surrounding education during the COVID-19 pandemic. Australasian Journal of Early Childhood, 45(4), 336-347.
- Erkal, E. A. (2021). Pandemi surecinde akademisyenlerin tukenmislik algisinin belirlenmesi: Agri Ibrahim Cecen Universitesi ornegi. International Journal of Economics, Politics, Humanities and Social Sciences, 4(4), 2636-8137.
- Ferguson, K., Frost, L., & Hall, D. (2012). Predicting teacher anxiety, depression, and job satisfaction. Journal of Teaching and Learning, 8(1), 27–42. https://doi.org/10.22329/JTL.V8I1.2896
- Global Education Cluster [GEC]. (2021). *Thematic Support*. https://www.educationcluster.net/content-page/2021-gec-thematic-support adresinden erisim saglanmistir.
- Gorgulu Ari, A., & Hayir Kanat, M. (2020). Covid-19 (Koronavirus) Uzerine Ogretmen Adaylarinin Gorusleri. Yuzuncu Yil Universitesi Sosyal Bilimler Enstitusu Dergisi, Salgin Hastaliklar Ozel Sayisi, 459-492. https://dergipark.org.tr/tr/pub/yyusbed/issue/56115/772126 adresinden erisilmistir.
- Guba, E. G., & Lincoln, Y. S. (1982). Epistemological and methodological bases of naturalistic inquiry. *Educational Communication and Technology Journal*, 30(4), 233–252.
- Hall, S. (2020, Ekim). Egitimin geleceginde bizi ne bekliyor? [Video]. TED. Erisim: https://www.youtube.com/watch?v=ZJLigrU-TUU adresinden erisilmistir.
- Holloway, I., & Wheeler, S. (1996). Qualitative research for nurses. Oxford: Blackwell Science Ltd.
- Kaffenberger, M. (2021). Modelling the long-run learning impact of the Covid-19 learning shock: Actions to (more than) mitigate loss. *International Journal of Educational Development*, 81, 102-126.
- Kaleli, Y. S. (2021). Covid 19 surecinde muzik ogretmenlerinin tukenmislik duzeylerinin incelenmesi. International Journal of Eurasia Social Sciences, 12(44), 262-277. http://doi.org/10.35826/ijoess.2881
- Kapcak, R. & Sakiz, H. (2022). Olaganustu kosullarda ogretmenlerde tukenmislik: covid-19 surecine iliskin bir inceleme. *Bogazici Universitesi Egitim Dergisi*, 39-1(2), 99-126.
- Kaya, B. (2020). Pandeminin ruh sagligina etkileri. Klinik Psikiyatri, 23, 123-124. http://doi.org/10.5505/kpd.2020.64325
- Kirmizigul, H. G. (2020). Covid-19 salgini ve beraberinde getirdigi egitim sureci. Avrasya Sosyal ve Ekonomi Arastirmalari Dergisi, 7(5), 283-289.
- Kingsley, O. (2010). African traditional education: A viable alternative for peace building process in modern Africa. Journal of Alternative Perspectives in the Social Sciences, 2, 136-159.
- Koparan, E., & Bekalp, B. (2020). Izolasyon surecinde iletisim ve uretim surecleri: kadinlarin home office dolayimli mesai ve is yuku donusumu. Moment Dergi, Iletisim Calismalarinda Yeni Yaklasimlar, 149-172. DOI: 10.17572/mj2020.2.149172
- Krumsvik, R. & Almås, A. G. (2007). Digitally literate teachers in leading edge schools in Norway. Journal of In-Service Education, 33(4), 479-497. https://doi.org/10.1080/13674580701687864
- Kuhfeld, M., & Tarasawa, B. (2020). The COVID-19 slide: What summer learning loss can tell us about the potential impact of school closures on student academic achievement. Erisim: https://www.nwea.org/content/uploads/2020/05/Collaborative-Brief Covid19-Slide-APR20.pdf

- Middletone, K. V. (2020). The Longer-Term Impact of COVID-19 on K–12 Student Learning and Assessment. Educational Measurement: Issues and Practice, 39(3), 41-44. doi: 10.1111/emip.12368
- Ozerbas, M. A., & Kuralbayeva, A. (2018). Turkiye ve kazakistan ogretmen adaylarinin dijital okuryazarlik duzeylerinin incelenmesi. *Journal Of Education*, 5(1), 2148-6999.
- Patton, M., & Cochran, M. (2002). A guide to using qualitative research methodology. Medecins Sans Frontieres, Paris.
- Sakiz, H. (2022). Delayed educational services during Covid-19 and their relationships with the mental health of individuals with disabilities. *Journal of Community Psychology*, 50(6), 2562–2577. https://doi.org/10.1002/jcop. 22676
- Sari T., & Nayir, F. (2020). Pandemi donemi egitim: sorunlar ve firsatlar. *Turkish Studies, 15*(4), 959-975. doi: 10.7827/TurkishStudies.44335
- Sahin, M. (2021). Uzaktan Egitim Surecinde Ogretmenlerin Yasadigi Sorunlar. *Journal of History School*, 52, 1734-1757.
- Telli, S. G., & Altun, D. (2020). Coronavirus ve cevrimici (online) egitimin onlenemeyen yukselisi. *Universite* Arastirmalari Dergisi, 3(1), 25-34. DOI: 10.32329/uad.711110
- UNICEF (2021). Promising practices for equitable remote learning: Emerging lessons from COVID-19 education responses in 127 countries. Innocenti Research Brief.
- Yildirim, A., & Simsek, H. (2013). Sosyal bilimlerde nitel arastirma yontemleri. Ankara: Seckin Yayincilik.
- Yildiz, C., Cekmez, E., & Butuner, S.O. (2012). Fenomenografik arastirma yontemi. Necatibey Egitim Fakultesi Elektronik Fen ve Matematik Egitimi Dergisi, 6(2), 77-102.
- Yildiz, B. B., & Dogan, B. (2021). Pandemi (Covid 19) surecinde egitimde dijital donusum uygulamalarinin ogretmen tutumlarina gore incelenmesi: EBA ornegi. *Turkish Studies Education, 16*(2), 1293-1309.
- Yontar, A. (2019). Ogretmen adaylarinin dijital okuryazarlik duzeyleri. Ana Dili Egitimi Dergisi, 7(4), 815-824.
- Zhou, M. (2014). Gender difference in web search perceptions and behavior: Does it vary by task performance? Computers & Education, 78, 174-184. doi:http://dx.doi.org/10.1016/j.compedu.2014.06.005

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