

Assessment of Distance Learning Practices during the COVID-19 Pandemic in Grades K-12

By Ebru Turan-Güntep̄, Tuğçe Durmuş[±] & Necla Dönmez-Usta[°]*

This study aims to examine the distance learning practices carried out at the primary education level during the COVID-19 pandemic from students' and their parents' perspectives. The study was conducted with 76 primary school students at different grade levels, including their parents (76), in the state schools of Giresun city in the spring semester of the 2019-2020 academic year. The study was based on the case study method, one of the qualitative research designs. An information collection form with open-ended questions was used as a data collection tool. The data obtained from the information collection form were analyzed by the content analysis method. The findings have revealed that the distance learning system has a flexible structure and is accessible from any place, but there are difficulties accessing the system due to connection problems. These systems facilitate the teaching process, affecting learning positively. The findings also showed that distance learning systems are not favored by students who long for friends and teachers during the learning process performed on these systems. Unlike face-to-face training, disciplinary and supervision problems in distance learning are also noteworthy. The authors finally suggest that the distance learning and management process should be performed in a restrained manner to ensure the process to be run effectively and efficiently.

Keywords: distance learning, COVID-19, K-12

Introduction

Causing global disorder and chaos (Sun, Tang, & Zuo, 2020), the COVID-19 pandemic has adversely affected many areas such as health, tourism, economy, and education, which are directly related to human life in Turkey, as is the case for the rest of the world. Health and education are among the most affected areas during the COVID-19 pandemic (Hebebcı, Bertiz, & Alan, 2020; Telli Yamamoto & Altun, 2020). Various measures were sought, and required changes were made on an unprecedented scale to minimize the COVID-19 pandemic's adverse effects on education (Gewin, 2020; Karakuş et al., 2020). The measures taken to limit the spread of the pandemic and maintain the social distance have made the education system stagnant as made so any other public systems, and educational institutions have had to suspend face-to-face education for a while (Daniel, 2020; Reimers & Schleicher, 2020). To overcome this stagnation, UNESCO has declared that governments should introduce alternative education tools and learning programs for students who cannot be present in school due to the pandemic-related emergency (Huang et al., 2020). Accordingly, educational activities have been

* Assistant Professor, Giresun University, Turkey.

[±] Primary School Teacher, Ministry of National Education, Turkey.

[°] Associate Professor, Giresun University, Turkey.

digitized on the Internet, and teachers and students have been supported by distance learning, where they can use information technologies without any time and place restriction (Sulkowski, 2020; Hodges et al., 2020; Tian et al., 2020; Sözen, 2020; Balaman & Tiryaki, 2021). Additionally, UNESCO underlined that governments should provide digital resources to students, establish radio and television channels to broadcast education, including digital resources in educators' curricula (UNESCO, 2020).

Distance learning is a system developed based on individuals' deprivation of sufficient opportunities, materials, and teachers to ensure their education (Newby, Stepich, Lehman, & Russell, 2006). Such individuals desire to develop themselves culturally, academically, and professionally and have physical discomfort or disability with restricted access to education stemming from a physical distance (Sözen, 2020). Compared to face-to-face education, the distance learning process has such advantages as providing access to information to large masses without time and space restrictions, promoting flexible educational process with rich content (Bates, 2015), enabling learners to learn at their individual pace, providing easy and fast access to information (Moore & Kearsley, 2012), and reducing training costs (Bakioğlu & Can, 2014). However, lack of individual interaction and socialization (Tryon & Bishop, 2009), learning difficulties experienced in applied lessons, the reliability of measurement and evaluation, and technology addiction can be counted as drawbacks. Although all these distance learning processes have similarities with face-to-face learning media, changing teacher/student roles and classroom conditions in distance education are of importance. Also, the platforms to be used in the distance education process should be structured according to the purpose, content, method, and needs, and expectations of the student (Turan-Günteppe, 2020).

Distance Learning at K-12 Level During the COVID-19 Pandemic

Distance learning, which offers educational opportunities for large masses in various circumstances, has played a unique role in maintaining education with diverse tools during the pandemic process in Turkey, as was the case in other countries. In this sense, the courses, contents, and materials created on the online EBA platform, an integral part of the distance learning system, were made available to the students, enabling the systemic education performance (Kapıdere & Çetinkaya, 2017; Özer, 2020). Two weeks following the schools' closure due to the pandemic, three new TV channels were introduced for distance learning: EBA Primary School, EBA Secondary School, and EBA High School. Weekly course programs are structured, and regular training is given to students via the Turkish Radio and Television Corporation (TRT) and EBA TV. The EBA content portal (www.eba.gov.tr) allowed easy access to EBA TV both on television and on the Internet.

Distance education in Turkey first started with asynchronous courses on TV, and then synchronous courses were included in the education system. As of April 27, 2020, all students from the third grade to the twelfth grade have started to get daily synchronized lessons at different times of weekdays. To access these

courses, teachers and students should create their respective EBA user accounts. Following the teachers' signing in EBA, they can give synchronized lessons defined by the school administrators, and then their students can attend the synchronized lessons defined by the teachers when they (the former) log in with their usernames. Synchronous lesson software available to teachers has features such as whiteboard application, screen sharing, turning on/off student voices, managing students' media sharing, drawing permissions, and their webcam use. Teachers can assign homework to students at the end of the synchronous lessons via the EBA system using methods like lecture videos and multiple-choice questions (MEB, 2020a). Accordingly, the EBA platform is used especially for asynchronous education, while the EBA TV, EBA live classroom, and alternative applications are preferred for synchronous education at the K-12 level during the pandemic (MEB, 2020b). MEB, which also includes artificial intelligence technologies in the distance learning process, has created the "EBA Assistant program" to instantly answer students' and parents' questions about distance learning and answered their questions directly (MEB, 2020c). Additionally, the smart guidance module called "Academic Support" has been introduced to the 11th and 12th grades. Thanks to this module, students were directed to lecture topics and videos or question-solving activities in line with their goals (YEĞİTEK, 2020).

Stakeholder Roles in Distance Learning

As educators, teachers need to be aware of their roles in distance learning, developing their qualifications for these roles. Berge (1995) stated, in this sense, that for the learning-teaching process to be successful, adequate attention should be paid to pedagogical, social, administrative, and technical roles. The following teacher-related issues are reviewed under the pedagogical roles such as making new instructional designs in accordance with the nature of distance learning, ensuring interaction within the teaching community, keeping students motivated at a high level, combining current technologies with teaching methods, and organizing assessment tools in the teaching process. Social roles cover certain roles like promoting students' level of social interactions with each other, creating sense of community, attaining sufficient knowledge about the curriculum, and guiding students. Some examples of the teacher's technical roles in the distance learning process can be cited as their ability to use current technologies without technical problems, providing support to students in case of such problems, performing skills like lesson planning, preparation, and management in terms of managerial roles (Liu, Hertzmann, & Popović, 2005).

As teachers' roles, students' roles have also changed in the distance learning circumstances. Distance learning platforms require students to participate in learning activities in online environments, interact with the teacher and other learners, and become a member of the learning group by participating in discussions. Also, students' taking responsibility for the learning process, having research skills, using learning tools effectively and asynchronously -in other

words-being a self-learning individual would positively affect the process (Dabbagh, 2007).

Parents have been taking on social, educational roles more than face-to-face environments in order not to leave the students alone by supporting them during the new normal dictated by the pandemic. K12 grade students' parents had to undertake roles directly related to learning and teaching as well as educational, social roles. Furthermore, these parents to be repositioned in the education system in schools and to recognize their new roles are of great importance. This role change can be initiated from the center and spread towards the periphery as K12 level schools are managed by a central governmental body, the MEB. Besides, providing learners and teachers with new skills and competencies, teaching them to survive by managing the process of change and adaptation should also be implemented under the supervision of these institutions (Bozkurt, 2020).

Keeping pace with the new normal during distance learning and adopting new roles has created diverse challenges for stakeholders. The limited knowledge and skills of the stakeholders, who are met with inevitable distance learning for the first time, prevent flawless execution during the process. Introducing distance learning swiftly without making the required planning has particularly affected students more than other stakeholders (Tuysuz & Ugulu, 2021). This study has considered this phenomenon and tried to reveal the views of the students who have to actively experience their own learning and the parents who play an essential role in smoothly continuing their children's education. Examining all these distance learning practices for both students and parents will provide added value to the literature in terms of increasing the quality of distance learning activities, identifying current shortfalls and problems, and qualified structuring of future face-to-face and distance learning practices. In addition, the literature review reveals that many studies have been carried out during the COVID-19 pandemic, especially on distance learning, but with a general focus on a single stakeholder. These studies generally cover undergraduates/graduates (Adnan & Anwar, 2020; Aristovnik et al., 2020; Cicha, Rizun, Rutecka, & Strzelecki, 2021; Lee, Fanguy, Lu, & Bligh, 2021; Salas-Pilco, Yang, & Zhang, 2022; Yeung & Yau, 2022), lecturers (Hanan, Firman, & Terasne, 2022; Marek, Chew, & Wu, 2021), teachers (Bayburtlu, 2020; Bakioğlu & Çevik, 2020; Çakın & Akyavuz, 2020; Malandrino & Sager, 2021; Nafsi & Maryanti, 2022; Shagiakhmetova et al., 2022), students (Maity, Sahu, & Sen, 2022; Moliner & Alegre, 2022; Pınar & Dönel-Akgül, 2020), and parents (Çakın & Akyavuz, 2021; Kaya, Mutlu-Bayraktar, & Inan-Kaya, 2022). Studies on multi-stakeholders in distant learning are limited (Ewing & Cooper, 2021; Wangdi, 2022; Yau, Yeung, & Lee, 2022). The focus of the study is the assessment of distance learning activities carried out by the MEB from the perspective of parents and students. Within the scope of this focus, the study sought answers to the following research questions:

1. From the perspective of parents and students, how do the teaching activities in distance learning affect learning processes?
2. How do teachers supervise the learning process in distance learning from the perspective of parents?

3. From the perspective of parents and students, how does distance learning affect the learning process in terms of students compared to face-to-face education?

Method

Research Model

In case studies, the researcher deliberately separates cases with unclear context from their context and narrowly analyzes events that are not available for observation, focusing on the whole (Yin, 1981; Schreiber & Asner-Self, 2011). The researcher delivers in detail the case described as the core of the research and clearly explores the underlying realities, limiting boundaries (Miles & Huberman, 1994). Besides, the essential feature of case studies is that their sample groups are people and experiences. Accordingly, case studies must primarily be designed in a way that persuades the sample group or interviewees to gather their appropriate responses (Shaban, 2009; Njie & Asimiran, 2014). The researchers have conducted this study, which aims to examine distance learning practices from the perspective of parents and students during the COVID-19 pandemic, using the case study method, one of the qualitative research designs.

Sample Group

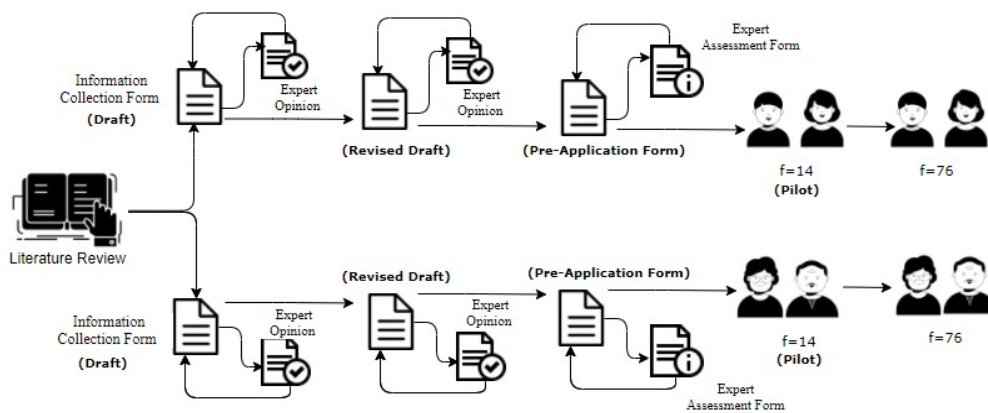
The study sample consists of 76 primary school students from various grade levels in state schools of Giresun and their parents (76). The sample was selected using the convenience sampling method due to the COVID-19 pandemic. The convenience sampling method, one of the qualitative research methods, is often deemed as the best sampling method adopted when the researcher is not able to employ other sampling methods (Yıldırım & Şimşek, 2016).

Data Collection Tool and the Process

The information collection form was used as a data collection tool to identify the distance learning practices implemented during the COVID-19 pandemic, from the perspective of students and their parents. While designing the form, the literature was reviewed, and the identified research problems were considered. The assessment form for distance learning practices was designed by making preliminary interviews on the phone and the Internet with two academicians and a teacher engaged in the said practices. Interviews were conducted online as per social distancing rules. The researchers considered the students' age and developmental status, and the research principles on child participation in the pre-interviews. They also paid attention to the development of the questions to serve the purpose of the research. Against this background, 18 open-ended questions were prepared separately for students and their parents. Questions have been developed under the following titles: Assessment of Access to Distance Learning

Practices from the Perspective of Parents and Students, Assessment of Technology-Supported Teaching Materials from the Perspective of Parents and Students, Assessment of Distance Learning Practices in Terms of Learning Process from the Perspective of Parents and Students, Assessment of the Distance Learning Process in Terms of Teachers from the Perspective of Parents and Students, Assessment of the Differences of Distance Learning from Face-to-Face Education from the Perspective of Parents and Students. Accordingly, a draft form was created. Expert opinion was obtained from three education experts, one in informatics, one in primary education, and one in primary education, leading to the draft revision. An Expert Assessment Form (EAF) was prepared to determine the content validity of the draft form thereafter. This form was delivered online to two academicians and one teacher with experience in preparing a distance learning information form for a pilot scheme. The draft form was updated in line with the experts' and teachers' feedback and was turned into a pre-application form. Simultaneously, the researcher teacher made an online pre-application, as a pilot scheme, to 14 students and their parents, founding any problem with the clarity and responsiveness of the form. The data collection tool was finalized and was utilized online due to the COVID-19 pandemic being effective at the time of the research. As a final step, the data collection tool was also created on Google forms, a survey administration software offered by Google, with a helpful, shareable link. The research application process is schematized in Figure 1.

Figure 1. Data Collection Process



Data Analysis

The data obtained from the information collection form were analyzed by frequency and content analysis methods. Two researchers examined the obtained data in detail and developed codes suitable for the participants' answers. Then, the consensus and disagreement of the two researchers were determined (Miles & Huberman, 1994). The research reliability was calculated as $100/(100+4)=0.92$, and the reliability of the codes and categories by the opinions of the parents was $42/(42+5)=0.86$. The codings were matched according to their similarities and differences, and subcategories/categories were identified by grouping them under

different titles. Themes were determined by using these created categories, and this process continued until the themes were established. Moreover, the findings were supported by some examples from participants' responses. The data were submitted to the field expert for finalization in order to verify the pertinence of the categories by the codes and to ensure whether they represent the theme. It is well established that an independent expert's reviewing data collection tools, raw data, coding during the analysis phase, and reporting process to ensure the validity and reliability of studies conducted under qualitative research is essential for improving the research quality (Yıldırım & Şimşek 2016, p. 87). Accordingly, the obtained data were finalized in line with the received feedback.

Ethic

The researchers meticulously employed the data collection tool and collected the data of parents and students at each step of the study by the principles of confidentiality and respect for human beings. Within the scope of the research, consent to participate in the research was obtained from the parents for both themselves and their children. Since the study is research with child participation, students' consent was also obtained. The limitations of the study and the age and development levels of the students were considered, and then the students were assured that their personal information shall not be shared with others during and after the research. It was declared to the students and their parents that they are free to withdraw, cease and not participate in any research phase. Parents who accepted to participate in the study on a voluntarily basis were assigned such codes as P₁, P₂... P₇₅, P₇₆, and students were assigned as S₁, S₂... S₇₅, S₇₆, under the confidentiality principle.

Findings

The study findings are categorized according to the themes created under the research questions, positive, partially, and negative are categorized, which are presented below.

Findings on 1st Research Question

Tables 1-3 show the findings on the first research question that reads: "From the perspective of parents and students, how do the teaching activities in distance learning affect learning processes?" Table 1 below presents findings on whether distance learning is a readily accessible teaching practice.

Table 1. Findings on Whether Distance Learning is a Readily Accessible Teaching Practice

Categories	Parent			Student		
	Codes	f	%	Codes	f	%
Positive	Readily accessible	29	38.1	Readily accessible	24	31.5
	Accessible anywhere	11	14.4	Possibility to connect via phone	6	7.8
	Faster	1	1.3	Continuous repetition	1	1.3
	Other	1	1.3			
Partly	When/if there is usage information	8	10.5	When any family elder is with me	2	2.6
	Not always availability of the Internet	4	5.2	When/if there is an Internet package	2	2.6
Negative	Hard to Access	9	11.8	Connection problems	21	27.6
	Not being provided preliminary information and not being taught how to use it	8	10.5	Unavailability of PC and tablet pc	10	13.1
	Lack of equal opportunities	4	5.2	EBA login problem	4	5.2
	Lack of tablet, phone, computer, etc.	1	1.3	Lack of knowledge about the technology use	4	5.2
				Other	2	2.6

Students' and parents' views on whether or not distance learning is a readily accessible practice were examined. Accordingly, twenty-nine parents (38% of the group) referred to distance learning as a readily accessible practice. Also, eleven parents make up 11% of the group with the code "accessible anywhere." In the same vein, twenty-four students stated that distance learning is a readily accessible practice. This constitutes 31% of the group. Eight parents under the partly accessible category made up 10% of the group with the code "When/if there is usage information," while two students (2%) expressed their views with the code "When any family elder is with me." Nine parents (11% of the group) believe that distance learning is hardly accessible, while twenty-one students (27% of the group) stated that the practice was hard to access, with the code of "Connection problems." Besides, the parents deemed the process as readily accessible in general, but the students (13% of the group) have adverse views on the practice with the code "Unavailability of PC and tablet pc."

Parents and students used the following statements in the "positive" category regarding whether or not distance learning is a readily accessible practice: P₇ "Distance learning is easily accessible. We can turn on the TV or watch it on the Internet," P₁₂ "An easy method. It can be used faster and everywhere," P₁₀ "Yes, because it made them remember by doing it again," P₁₈ "Yes, we can access it easily, and the hours are pre-determined, now he/she gets up and watches the channel," P₃₃ "Yes, it is an easy practice in terms of due hours and its feature that does not require transportation," P₇₆ "Yes. Thanks to the repetitions, it is easy to reach them as there are several repetitions during the day," S₁₉ "No, it didn't happen to me. Lessons are aired twice a day. Let's say I missed it, maybe it happened twice, I can watch it again," S₁₆ "it is easy because it can be used with

various browsers," S₂₉ "I did not have any problems with it. We tuned the channel on the TV, and I watch the lessons."

Participants stated the following in the "partly" category regarding whether or not distance learning is a readily accessible practice: P₁₈ "Yes for children having well-established infrastructure," P₃₄ "Where the Internet is available, yes," P₃₉ "It can be so, education can be conducted if the Internet is available," P₇₅ "The practice is partially sufficient, even though it is not the same as in school," P₉ "If there is no Internet problem, yes," S₁₀ "Sometimes we couldn't login. If there is a connection, I think the application is accessible."

The parents and students expressed the following in the "negative" category regarding whether or not distance learning is a readily accessible practice: P₅₀ "It is not so because the student-teacher relationship is more efficient in the face-to-face classroom setting," P₃₈ "No, since we are having problems with the Internet. Sometimes we can't login due to high traffic. That's why we cannot attend some classes. So, we have to pass to another topic without understanding the current one," P₆₇ "We have many network problems. Some students could not attend lessons," P₂₃ "No it's not the case. We accessed so easily," S₃₂ "No, it's not. I had Internet connection problems during live classes. I was unable to connect via my father's phone," S₃₀ "Most of the time, I could not attend EBA," S₃₇ "There was an Internet problem, the connection was lost," S₃₈ "I could not get easy access due to EBA update," S₂ "Disconnections occurred. Most of the time I couldn't connect," S₄₂ "No. EBA is consuming too much Internet quota."

Table 2 shows the findings on the effect of technology-supported teaching materials used in distance learning on the learning process.

Table 2. Findings on the Effect of Technology-supported Teaching Materials Used in Distance Learning on the Learning Process

Categories	Parent			Student		
	Codes	f	%	Codes	f	%
Positive	Facilitation of the learning process	29	38.1	Ease of Use	19	25
	Ease of use/accessibility at any time	11	14.4	Accessibility	6	7.8
	Popularization of the use of mobile phones, tablets and PCs	2	2.6	Research possibility	3	3.9
Partly	When/if it is used within the correct time intervals	8	10.5	When/if the conditions and equipment are proper	5	6.5
	When/if the Internet is available	3	3.9	If it is used duly	2	2.6
Negative	Hard to use	16	21	Lack of tablet, phone, computer, etc.	16	21
	Lack of equal opportunities	3	3.9	Lack of infrastructure	13	17.1
	Lack of tablet, phone, computer, etc.	1	1.3	No real learning environment / Boring / Causing attention deficit	5	6.5
	Not being provided preliminary information and not being taught how to use it	1	1.3	Time limitation	5	6.5
				Difficulty of use	2	2.6

Students' and parents' views on the effect of technology-supported learning materials used in distance learning on the learning process were examined. Accordingly, 29 parents have a positive opinion with the code "Facilitation of the learning process." This makes up 38% of the parents. Nineteen students have a positive opinion with the code "Ease of use/accessibility at any time", constituting 25% of the group. Eight parents are of the opinion that distant learning has a positive effect as long as it is used within the correct time intervals, while five students think that the practice contributes positively only when the conditions and equipment can be provided and adjusted correctly. Sixteen parents with negative views by the code "Hard to use" constitute 21% of the group, and 16 students have also negative views by the code "Lack of tablet, phone, computer, etc." This constitutes 21% of the student sample. The evaluations revealed that 53 parents (67% of the group) had positive or partly positive views, while 41 students (53% of the group) had negative views.

Participants stated the following in the "positive" category regarding the effect of technology-supported learning materials used in distance learning on the learning process: P₂₅ "Sure, this was the case. At least, we tried to give the information we had. I tried to teach. Of course, we used technological support during the process," P₃₁ "Yes, it enabled him to learn the lessons," P₄₅ "Yes. We did different activities," P₅₂ "Yes. He listened to his lessons on TV. He watched homework and live lectures on the phone," P₅₇ "Yes. He learned subjects he did not know thanks to technological support," P₅₈ "It facilitated the learning process by making it possible to reach educational resources in a short time," P₆₀ "Yes. Watching videos, doing what is explained in some videos, solving the tests loaded on EBA, and doing activities with repetitions of the subject, especially by using technological materials, contributed to the learning process," P₆₃ "I think this was the case because we were able to replay and watch topics that we didn't understand or couldn't remember," S₇₄ "Yes. I can now more easily do my homework assigned via virtual platforms on my own," S₆₃ "I consolidated what I watched and learned in EBA through different videos and questions," S₅₂ "I think so because I learn much information."

The parents and students expressed the following in the "partly" category regarding the effect of technology-supported learning materials used in distance learning on the learning process: P₃₈ "As long as we had no problems with the Internet, it contributed to us," P₆₈ "It's contributed a little. We were able to benefit just as we accessed," P₇₂ "We have greatly benefited from it when we have the Internet," S₂₅ "Not much. The more there is on the phone," S₄₉ "Technology contributes to distance learning, but it could be more ...! At least, I wish there had been a clearer, smooth, trouble-free intercommunication...!" P₅₇ "If the internet connection had been a little better, it would have been better," S₆₁ "A little bit yes, a little no. At this age...! The use of technology should be clear, easy-to-understand, and images, sound and similar issues should be clear-cut and smooth."

Parents and students expressed the following in the "negative" category regarding the effect of technology-supported learning materials used in distance learning on the learning process: P₇₂ "My response is negative because of the inequality arising from the purchasing power and the economic circumstances of

the society," P₆₅ "No, it's not enough," P₃₈ "We had problems with the Internet," S₄₄ "No, it did not provide any positive effect because I don't have any technological device other than my phone," S₇₁ "No. We cannot use it when we desire so," S₇₄ "I do not find it sufficient because we have learned too little," S₆₀ "Listening lessons on TV and computer for a long time is boring for me," S₆₅ "No. We listen but don't understand lessons. I'm getting distracted."

Table 3 presents the findings on distance learning's positive/negative contributions to the learning process.

Table 3. Findings on Distance Learning's Positive/Negative Contributions to the Learning Process

Categories	Parent			Student			
	CODES	f	%	Codes	f	%	
Positive	Providing positive contribution to the learning process	39	51.3	Keeping up with lessons' progress pace	8	10.5	
	Teaching and reminding of lessons with different topics	4	5.2	Providing positive contribution to the learning process	7	9.2	
	Establishing a bond with school	3	3.9	Making the distant closer	2	2.6	
	Not hindering training and education	2	2.6	Learning without time limits	1	1.3	
	Enabling safe education at home	2	2.6				
	Best method to use in extraordinary circumstances	1	1.3				
	Partly Positive	Providing partly positive contribution to the learning process	10	13.1	When/if there are no interruptions during lessons	9	11.8
When/if there is no intensive schedule		1	1.3	Although lesson duration is short	7	9.2	
Although exam-referenced studies are carried out		1	1.3	Providing partly positive contribution to the learning process	1	1.3	
Negative	Providing negative contribution to the learning process	10	13.1	Lack of communication with schoolmates/teacher	11	14.4	
				Connection problems	7	9.2	
				Yearning for teachers	7	9.2	
	Not substituting for education at school	3	3.9	Lack of school order/setting	6	7.8	
					Not offering peer-to-peer training opportunities	4	5.2
					Not apprehending classes	3	3.9
					School is more fun	1	1.3
					Lessons on TV	1	1.3
				Other	1	1.3	

The assessment of the parents' and students' views on distance learning practices' positive contributions to the process showed that 36 parents out of 76 believe that distant learning contributes positively to the learning process. This constitutes 51% of the parents. Also, eight students are of the opinion that the practice makes a positive contribution to learning by stating that they do not miss the lessons, constituting 10% of the group. Ten parents (13% of the group) think

that distance learning practices partially contribute positively, while nine students adopted the code "When/if there are no interruptions during lessons." This constitutes 11% of the group. Ten parents who believe that distance learning contributes negatively constitute 13% of the group, and 11 students have a negative opinion with the code "Lack of communication with schoolmates/teacher." This constitutes 14% of the group. Parents think that the distance learning process does not make a negative contribution in terms of communication, while 11 students have negative views by the code "Lack of communication with schoolmates/teacher." This constitutes 11% of the student sample. Only 13 parents (17% of the group) have negative views, while 41 students with negative views constituted 53 percent.

Parents and students expressed the following in the "positive" category regarding distance learning's contribution to the learning process: P₆₄ "Of course, there was positive contribution. Students did not break with the school discipline. We made our teaching plan according to the lessons," P₄₅ "Yes, this was the case. We were not left idle, and there was a nice process with the help of EBA TV and our teacher's live lessons," P₅₉ "Yes, he/she learned new topics," P₆₃ "Of course, yes. Students did not break with the school discipline. We made our teaching plan according to the lessons," P₇₄ "I can say this was the case. Trying to learn only on digital platforms enabled him/her to look at learning from a different perspective," S₃₈ "Despite the COVID-19 pandemic, our teachers can teach us lessons," S₂₇ "I can follow the lectures even remotely," S₇₄ "My teacher explains better and in a more comprehensive way, and it makes me happier to take lessons with my friends."

The participants stated the following in the "partly" category regarding distance learning's contribution to the learning process: P₁₆ "Its contribution was a bit because due to the high internet traffic," P₁₁ "It did not exactly replace the school; however, it is partially beneficial," P₆₇ "Although it does not similar to in situ learning at school, it was beneficial to some extent," S₄₀ "The duration of lessons is short, it would be better if it was longer."

Parents and students expressed the following in the "negative" category regarding distance learning's contribution to the learning process: P₅₄ "No, it did not provide any contribution. Education is not like in school, the lessons were always simplified," P₂₁ "It was not as useful as it was in school," S₂₆ "School is more fun," S₃₃ "Several problems could happen in teachers' Internet connection," S₃₇ "It is bad that my friends are not with me," S₄₆ "Lesson hours are short, lectures are given too quickly, and it is not like in school," S₇₆ "I had trouble in connection," S₅₉ "I cannot pose any question when I do not understand, or my teacher does not hear the answers I gave to the questions," S₅₇ "Two major problems: not being able to connect and not feeling my teacher's presence."

Findings on 2nd Research Question

Table 4 shows the findings on the second research question that reads: "How do teachers supervise the learning process in distance learning from the perspective of parents?"

Table 4. Findings on Teachers' Supervising the Learning Process in Distance Learning

Categories	Parent			Student		
	Codes	f	%	Codes	f	%
Positive	By caring and attending	43	56.5 %	Whenever we need	25	32.8
	By examining through tests and evaluations	7	9.2	By using technological materials	18	23.6
	By checking homework	6	7.8	Through calls / messages	16	21
	By keeping in touch	5	6.5	By using educational materials	13	17.1
	By making information	4	5.2	Other	2	2.6
	By asking questions	2	2.6			
	Identifying the shortcomings	1	1.3			
	Through online communication	1	1.3			
Partly	Less involved than face-to-face learning	1	1.3	When/if time allows	3	3.9
	By sending educational videos from time to time	1	1.3	When/if the connection is available	2	2.6
Negative	Lessons were not interactive	4	5.2	Other	1	1.3
	Other	1	1.3			

Students' and parents' views on teachers' supervising the learning process in distance learning were examined. Accordingly, 43 parents are of the opinion that the teachers follow the process with the code "By caring and attending." This constitutes 56% of the parents. Similarly, 25 students expressed that the process was monitored by teachers with the code "whenever we need." This also constitutes 32% of the students. Besides, 18 students stated that their teachers supervised the process "By using technological materials." This makes up 23% of the group. Finally, four parents stated that the teachers did not monitor the learning process because the lessons were not interactive, while three students said that teachers follow the process as long as they find the time.

Parents and students expressed the following in the "positive" category regarding the teachers' supervising the learning process in distance learning: P₉ "Our teacher used some learning material. He/she has an online board where he/she explain topics, and we understand them very well," P₁₇ "Our teacher has always been in interaction with the children during this burdensome process. He/she took care of them as if they were in real school settings," P₂₃ "Yes, it is undoubtedly so. Our teacher is very effective in this regard," P₄₆ "He/she definitely questioned and did his/her best. He/she has always supported our children during the process," P₄₉ "During the education, our teacher asked questions such as "Do you understand?, Should I explain sufficiently?" while also directing some instructions as "Come on, please answer those who do not understand." He/she enabled us to understand and learn the subject adequately by repeating the answers. He/she helped us to socialize by dealing with all of us one by one, mostly at the beginning of the course. We are grateful to our teacher, and thank him/her," P₅₃ "He/she continuously supervised. He/she did so sometimes by peer-to-peer, sometimes collectively. Through questions and answers, he/she questioned whether the topic was understood. He/she asked if we had any questions and meticulously required us to repeat what we learned," P₆₀ "Yes, he/she questioned

and checked homework. He/she asked students questions about the topic of the day or the week. He/she gave additional information on the less comprehended topics," P₆₂ "He/she questioned. He/she was caring, many thanks to him/her," S₂₉ "We had a class group. Our teacher talked to us and answered our questions without bothering us."

The participants stated the following in the "partly" category regarding the teachers' supervising the learning process in distance learning: P₃₃ "He/she seemed less interested compared to real school settings," S₂ "He/she was trying to answer but not at a sufficient level."

One parent stated the following in the "negative" category regarding the teachers' supervising the learning process in distance learning: V₆₉ "No, since there was no interaction in every lesson."

Findings on 3rd Research Question

Table 5 shows the findings on the third research question that reads: "From the perspective of parents and students, how does distance learning affect the learning process in terms of students compared to face-to-face education?"

Table 5. Findings on the Differences Between Students in Distance Learning and Those in Face-to-Face Education

Categories	Parent			Student		
	Codes	f	%	Codes	f	%
Positive	No downsides	4	5.2	Allowing communication	14	18.4
				Satisfying the longing	5	6.5
				Strengthening friendship bond	2	2.6
Negative	Failure to maintain discipline and school setting	18	23.6	Yearning for friends/teachers	23	30.2
	Decrease in student efficiency	17	22.3	Disliking distance learning	17	22.3
	Lack of class atmosphere	15	19.7	No real interaction with teachers	16	21
	Decreased lecture concentration / Difficulty in perceiving	13	17.1	Failure to ask questions / to communicate	14	18.4
	Unwillingness and failure to be happy	10	13.1	Failure to understand lessons	13	17.1
	Lesser course duration	8	10.5	Failure to perform extracurricular activities	12	15.7
	Communication problem with the teacher	8	10.5	Yearning for school	10	13.1
	Connection problems	6	7.8	Access problem	6	7.8
	Failure to focus	6	7.8	Failure to play games	5	6.5
	Too much screen time / Screen addiction	4	5.2			
	School alienation	4	5.2			
	Distancing from teacher	4	5.2			
	Inequality of opportunity	3	3.9			
	Lack of friendship, natural environment, etc.	3	3.9			
	Technology-related drawbacks	3	3.9			
	Lack of communication	3	3.9			
	Differentiation of perspective on education	3	3.9			
Cyber attack	1	1.3				

Students' and parents' views on the differences between the students in distance learning and those in face-to-face education were examined. Accordingly, four parents (5% of the group) have positive a view of the code "No downsides." while 14 students (18% of the group) also have positive opinion of the code "Allowing communication." Eighteen parents (23% of the group) have negative views by the code "Failure to maintain discipline and school setting," and 23 students (30% of the group) also have negative views by the code "Yearning for friends/teachers." Besides, 17 parents (22% of the group) are of the opinion that the efficiency of the students decreased. Seventeen students (22% of the group) stated that they did not like distance learning, and 16 students said that they could not have any real face-to-face interaction with their teachers. This constitutes 21% of the group. Only four parents positively rated the teaching on distance learning platforms, and 21 students think that distance learning has positive aspects.

The participants stated the following in the "negative" category regarding the differences between the students in distance learning and those in face-to-face education: P₂ "Surely, distance learning is not like face-to-face education. The classroom environment is more effective in face-to-face education," P₁₂ "Children don't take distance learning too seriously. We were not having such a hard time in face-to-face training," P₁₈ "Of course, there is a big difference. Face-to-face education has been a great blessing in terms of teacher-student interaction. However, only a teacher on TV speaks in distance learning, so there is no reciprocal communication," P₄₅ "School settings and home are different. Students are more comfortable at home, the discipline at school lacks at home, and children enjoy this comfort," P₄₈ "There is an attention deficit in distance learning. Children feel more responsible in face-to-face education; I think they influence each other positively and participate in the lessons better thanks to this friendly environment," P₆₂ "Face-to-face education is better; it is more effective for students to listen to lessons together with their friends. Students cannot be absorbed much in lessons during distance learning," P₇₀ "My child is distracted," P₆₁ "Distance learning... reduces naturalness, friendly environment, learning practices, etc. This can also be called robotization," P₇₀ "Children are distracted," P₇₂ "There are great differences in terms of students' feeling responsible," V₇₄ "Of course, there are differences. Students get bored in distance learning most of the time. They are happy and active in face-to-face education." No view was declared in the "partial" category.

The participants stated the following in the "negative" category regarding the differences between the students in distance learning and those in face-to-face education: S₆₇ "I have missed studying and playing games with my friends at school," S₆₀ "My answers are not heard. I cannot ask any point I didn't understand. The teacher doesn't see when I raise my hand," S₅₉ "I understand better what my teacher explained to me, and I am also with my friends," S₆₇ "I prefer to learn face-to-face. I used to both study and play games with my friends at school."

The participants stated the following in the "positive" category regarding the differences between the students in distance learning and those in face-to-face education: S₈ "I was in regular communication with my friends and my teacher," S₆₃ "I could ensure my interest with my lessons at home and I continued to learn,"

S₃₉ "Distance learning is better. We have no responsibilities like in school 😊😊😊 since we are all children."

Discussion

In this study, which was carried out to assess distance learning practices from students and their parents' perspectives, parents revealed that distance learning was accessible from anyplace in learning process thanks to its platforms. Similarly, Bates (2015) stressed that distance learning has a more flexible structure than of face-to-face education, as the former can be easily accessed from anywhere and at any time. Accordingly, such structures can be an alternative in the learning process, especially for individuals who receive lifelong formal education and non-formal education, and individuals with disabilities, as well as for extraordinary circumstances like pandemics. Also, even if the pandemic ends, MEB can continue to take the advantage of distance learning, such as flexibility, learning at any place and time, through hybrid education where face-to-face education and distance learning is intertwined. Students, like their parents, also noted that these platforms are easily accessible. However, the study showed that students had difficulties in accessing the distance learning platforms due to connection problems. If these deficiencies are eliminated, the use of related environments will provide flexibility in learning to facilitate the learning process, provide more opportunities for the transfer of knowledge and practices, and increase accessibility to resources anytime and anywhere (Regmi & Jones, 2020). Research findings indicate that technology-supported learning materials used in distance learning facilitated the learning process. However, some parents stated that these technology-supported materials are challenging. Unlike parents, students find these materials easy to use. This is probably since today's generation, called digital natives, has been in constant interaction with technology since the day they were born. Although the literature review indicates that a large part of this generation has technological tools such as computers and mobile phones (Kennedy et al., 2008), the research revealed that students were negatively affected by inadequate internet infrastructure and the lack of tools such as tablets, phones, and computers (O'Malley, 2020; Özgöl, Sarıkaya, & Öztürk, 2017). Similar to research findings, Budi et al. (2020) emphasize that 10 percent of the participants in the study do not have a laptop or personal computer, 16 percent do not have internet access, and 49 percent cannot participate in distance education due to the limited capacity of different online environments and unstable internet access. However, it is possible to mention that the existing classroom climate and the effectiveness of the learning process are significantly impacted by the order and discipline issues encountered in the remote education process (Morgan, 2020; Carrillo & Flores, 2020). Most of the parents noted that distance learning contributed positively to the learning process. Moreover, Kang and Zhang's (2020) study stressed that education in this process promotes the learning level and motivation of students. Students also consider distance learning an effective tool to positively contribute to the learning process and not miss their lessons. Similarly, Sindiani et al. (2020) stated in his

research that distance learning is an excellent option for the learning process in extraordinary circumstances like pandemics. He also stated that the unexpected breaks during lessons caused by connection problems experienced in this process, short course durations, and students' longing for their teachers also adversely affected the process. Besides, as indicated in Table 5, students long for friends and teachers in distance learning platforms. Özgöl, Sarıkaya and Öztürk (2017) stated that students desire face-to-face education and that the use of distance learning practices adversely affects their self-confidence in the long term during distance learning. Additionally, the literature review also shows that when students have become distanced from face-to-face education during this period, they are less happy (Munasinghe et al., 2020) and feel lonely (Lee, Ward, Chang, & Downing, 2020). In other words, the happiness of the students in the process directly affects the active participation of the student in the learning process and student performance (Durón-Ramos, Mojica-Gómez, Villamizar-Gomez & Chacón-Andrade, 2020; Kahu, Picton, & Nelson, 2020). This may indicate that distance learning is structured solely based on learning and that pedagogical and social roles other than those of the learning process are ignored. Most parents underlined that teachers take care of their students, following them continuously during the distance learning process. Similar to parents, students also stated that their teachers guided them when needed. Lee, Fanguy, Lu, and Bligh (2021) suggest in their study that the educators' efforts to communicate with students and ensure student success during the pandemic positively affect student satisfaction, thereby the learning process. One of the key findings of the study is that teachers follow and guide students using technological materials and tools. Teachers should guide and lead in the distance learning process (Gülbahar, 2019). Although it is easy to supervise and guide students on face-to-face education, problems are experienced in student performance and supervision of their learning activities outside the school in distance learning (Balaman & Tiryaki, 2021). In this regard, we can suggest that teachers correctly positioned themselves as a guide in the distance education process and that they guide students during the process of structuring their learning, even cooperating with parents. Comparing the distance learning process with face-to-face education, the parents revealed that, of the teacher's managerial roles, those related to classroom management, such as disciplinary and supervision problems and lack of class atmosphere, are lacking. Although face-to-face and virtual classrooms feature certain similarities, there remain differences between these environments, and a qualified education would be carried out if the process is well structured by considering these differences (Turan-Güntepe, 2020). Moreover, the decrease in student productivity in distance learning is one of the key findings of the study. Similarly, regarding the distance education process, Balaman and Tiryaki (2021) suggested in their study that motivation directly affects student academic performance. Furthermore, the students' disapproval of distance learning and their inability to communicate with teachers face-to-face negatively affect their attitudes towards distance learning platforms. Some studies in the literature underlined that students are not satisfied with distance learning, and favor face-to-face education (Patricia, 2020; Sindiani et al., 2020). This phenomenon may be the underestimation of fundamental issues such as how the

teaching process should be designed, organized, and managed in the compulsory transition to the distance learning process. To remedy the situation, different instructional design modules, which are structured by considering the individual differences of the learners, can be used to increase the learners' interest, satisfaction, and motivation in the learning-teaching process, as well as contribute to their active participation in the process (Popyk, 2021).

Conclusion

In the study in which the distance education process is evaluated by students and parents during the pandemic process are evaluated; it has been concluded that the applications used for distance education can be accessed from anywhere and offer a flexible environment in unexpected situations such as pandemics. In addition, it has been that the connection problems caused by the internet infrastructure in distance education cause disconnections in the lessons. The inability of students to see the teacher face-to-face and to communicate face-to-face in distance education negatively affects students' approaches to distance education. At this point, building hybrid learning environments instead of using distance education completely can help students overcome their unfavorable attitudes.

Another result obtained from the study is in accordance with the roles and responsibilities of the distance education process of teacher's when students need them that guided that the student and is to lead the way. In addition, it was determined that the teacher followed the students with the technological tools that were used and cooperated with the parents in the process. However, it is possible to mention that the order and discipline problems experienced in the distance education process negatively affect the current classroom climate and the efficiency of the learning process. At this point, it can be suggested that the methods applied for disciplinary problems encountered even in face-to-face education should be integrated into the distance education process considering student profile and classroom climate.

The study results revealed distance learning should be planned in detail, and its management process should proceed in a restrained manner to enable an effective and efficient distance learning process. Finally, strengthening the Internet infrastructure or providing fast and reliable internet connection to schools, making it available to individuals to minimize connection problems in distance learning, can be an effective tool to make the process better.

References

- Adnan, M., & Anwar, K. (2020). Online Learning amid the COVID-19 Pandemic: Students' Perspectives. *Online Submission*, 2(1), 45-51.
- Aristovnik, A., Keržič, D., Ravšelj, D., Tomaževič, N., & Umek, L. (2020). Impacts of the COVID-19 Pandemic on Life of Higher Education Students: A Global Perspective. *Sustainability*, 12(20), 8438.

- Bakioğlu, A. & Can, E. (2014). *Quality and Accreditation in Distance Education*. Vize Publishing.
- Bakioğlu, B., & Çevik, M. (2020). Science Teachers' Views on Distance Education in the COVID-19 Pandemic Process. *Electronic Turkish Studies*, 15(4), 109-129.
- Balaman, F., & Tiryaki, S. H. (2021). The Opinions of Teachers About Compulsory Distance Education due to Corona Virus (COVID-19). *Journal of the Human and Social Sciences Researches*, 10(1), 52-84.
- Bates, R. H. (2015). *When Things Fell Apart*. Cambridge University Press.
- Bayburtlu, Y. S. (2020). Turkish Education During COVID-19 Pandemic Distance Education Process. *Electronic Turkish Studies*, 15(4), 131-151.
- Berge, Z. L. (1995). Facilitating Computer Conferencing: Recommendations from the Field. *Educational Technology*, 35(1), 22-30.
- Bozkurt, A. (2020). Coronavirus (COVID-19) Pandemic Process and Evaluations for Education in the Post-Pandemic World: New Normal and New Education Paradigm. *Journal of Open Education Applications and Research*, 6(3), 112-142.
- Budi, H. S., Ludjen, J. S. M., Aula, A. C., Prathama, F. A., Maulana, R., Siswoyo, et al. (2020). Distance Learning (DL) Strategies To Fight Coronavirus (COVID-19) Pandemic at Higher Education in Indonesia. *International Journal of Psychosocial Rehabilitation*, 24(7), 8777-8782.
- Çakın, M., & Akyavuz, E. K. (2020). The COVID-19 Process and its Reflection on Education: An Analysis on Teachers' Opinions. *International Journal of Social Sciences and Education Research*, 6(2), 165-186.
- Carrillo, C. & Flores, M. A., (2020). COVID-19 and Teacher Education: A literature review of Online Teaching and Learning practices. *European Journal of Teacher Education*, 43(4), 466-487.
- Cicha, K., Rizun, M., Rutecka, P., & Strzelecki, A. (2021). COVID-19 and Higher Education: First-Year Students' Expectations toward Distance Learning. *Sustainability*, 13(4), 1889.
- Dabbagh, N. (2007). The Online Learner: Characteristics and Pedagogical Implications. *Contemporary Issues in Technology and Teacher Education*, 7(3), 217-226.
- Daniel, J. (2020). Education and the COVID-19 Pandemic. *Prospects*, 49(1), 91-96.
- Durón-Ramos, M. F., Mojica-Gómez, P. A., Villamizar-Gomez, K., & Chacón-Andrade, E. R. (2020). Impact of Positive Personal Traits on University Student Engagement in Mexico, Colombia, and El Salvador. *Frontiers in Education*, 5(12), 1-6.
- Ewing, L. A., & Cooper, H. B. (2021). Technology-Enabled Remote Learning During COVID-19: Perspectives of Australian Teachers, Students and Parents. *Technology, Pedagogy and Education*, 30(1), 41-57.
- General Directorate of Innovation and Educational Technologies - YEĞİTEK (2020). *Increase in EBA and Live Classroom Usage Hours*. YEĞİTEK.
- Gewin, V. (2020). Five Tips For Moving Teaching Online as COVID-19 Takes Hold. *Nature*, 580(7802), 295-297.
- Gülbahar, Y. (2019). *E-learning*. Ankara: Pegem Publishing.
- Hanan, A., Firman, E., & Terasne, T. (2022). Investigating English Lecturers' Strategies of Committing Online Written Corrective Feedback During COVID-19 Pandemic. *Journal of Languages and Language Teaching*, 10(1), 46-55.
- Hebecci, M. T., Bertiz, Y., & Alan, S. (2020). Investigation of Views of Students and Teachers on Distance Education Practices During the Coronavirus (COVID-19) Pandemic. *International Journal of Technology in Education and Science (IJTES)*, 4(4), 267-282.
- Hodges, C., Moore, S., Lockee, B., Trust, T., & Bond, A. (2020). The Difference Between Emergency Remote Teaching and Online Learning. *Educause Review*, 27, 1-12.

- Huang, R. H., Liu, D. J., Tlili, A., Yang, J. F., & Wang, H. H. (2020). *Handbook on Facilitating Flexible Learning During Educational Disruption: The Chinese Experience in Maintaining Undisrupted Learning in COVID-19 Outbreak*. Smart Learning Institute of Beijing Normal University.
- Kahu, E. R., Picton, C., & Nelson, K. (2020). Pathways of Engagement: A longitudinal Study of the First-Year Student Experience in the Educational Interface. *Higher Education*, 79(4), 657-673.
- Kang, X. & Zhang, W. (2020). An Experimental Case Study on Forum-based Online Teaching to Improve Student's Engagement and Motivation in Higher Education. *Interactive Learning Environments*, 28(7), 1-12.
- Kapıdere, M., & Çetinkaya, H. N. (2017). An Evaluation of Mobile Application of Education Informatics Network (EBA). *International Journal of Active Learning*, 2(2), 1-14.
- Karakuş, N., Ucuzsatar, N., Karacaoğlu, M. Ö., Esendemir, N., & Bayraktar, D. (2020). Turkish Teacher Candidates' Views on Distance Education. *Journal of Language and Literature Studies*, (19), 220-241.
- Kaya, I., Mutlu-Bayraktar, D., & Inan-Kaya, G. (2022). Digital Media Use of Preschool-Aged Children During the COVID-19 Pandemic: Parent Perspectives. In *Policies and Procedures for the Implementation of Safe and Healthy Educational Environments: Post-COVID-19 Perspectives* (pp. 182-202). IGI Global.
- Kennedy, G., Judd, T., Churchward, A., Gray, K., & Krause, K. (2008). First Year Students' Experiences with Technology: Are they Really Digital Natives? *Australasian Journal of Educational Technology*, 24(1), 108-122.
- Lee, K., Fanguy, M., Lu, X. S., & Bligh, B. (2021). Student Learning During COVID-19: It was Not as Bad as we Feared. *Distance Education*, 42(1), 164-172.
- Lee, S. J., Ward, K. P., Chang, O. D. & Downing, K. M. (2020). Parenting Activities and the Transition to Home-based Education During the COVID-19 Pandemic. *Children and Youth Services Review*, 122(117), 1-10.
- Liu, C. K., Hertzmann, A., & Popović, Z. (2005). Learning Physics-based Motion Style with Nonlinear Inverse Optimization. *ACM Transactions on Graphics (TOG)*, 24(3), 1071-1081.
- Malandrino, A., & Sager, F. (2021). Can Teachers' Discretion Enhance the Role of Professionalism in Times of Crisis? A Comparative Policy Analysis of Distance Teaching in Italy and Switzerland During the COVID-19 Pandemic. *Journal of Comparative Policy Analysis: Research and Practice*, 23(1), 74-84.
- Maity, S., Sahu, T. N., & Sen, N. (2022). COVID-19 and Digital Primary Education: Impact and Strategies for Sustainable Development. *Journal of Development Policy and Practice*, 7(1), 10-30.
- Marek, M. W., Chew, C. S., & Wu, W. C. V. (2021). Teacher Experiences in Converting Classes to Distance Learning in the COVID-19 Pandemic. *International Journal of Distance Education Technologies (IJDET)*, 19(1), 40-60.
- MEB (2020a, November 20). *Education Informatics Network Class Based Timeline*. Republic of Turkey Ministry of National Education, General Directorate of Innovation and Educational Technologies.
- MEB (2020b, November 18). *Details of the Distance Education Process*. Available at: <https://www.meb.gov.tr/uzaktan-egitim-surecinin-detaylari/haber/21990/tr>.
- MEB (2020c, November 21). *EBA Asistan*. Republic of Turkey Ministry of National Education. Available at: <https://www.meb.gov.tr/eba-asistan-uzaktan-egitimde-cevapsiz-soru-birakmayacak/haber/20829/tr>.
- Miles, M. B., & Huberman, A. M. (1994). *An Expanded Sourcebook-Qualitative Data Analysis*. 2nd Edition. London: SAGE Publications.

- Moliner, L., & Alegre, F. (2022). COVID-19 Restrictions and its Influence on Students' Mathematics Achievement in Spain. *Education Sciences, 12*(2), 105.
- Moore, M. G., & Kearsley, G. (2012). *Distance Education: A Systematic View of Online Learning*. 3rd Edition. Belmont, VA: Wadsworth Cengage Learning.
- Morgan, H. (2020). Best Practices for Implementing Remote Learning During a Pandemic, the Clearing House, *Journal of Educational Strategies, Issues And Ideas, 93*(3), 135-141.
- Munasinghe, S., Sperandei, S., Freebairn, L., Conroy, E., Jani, H., Marjanovic, S., et al. (2020). The Impact of Physical Distancing Policies During the COVID-19 Pandemic on Health and Well-Being Among Australian Adolescents, *Journal of Adolescent Health, 67*, 653-661.
- Nafsi, N. R. R., & Maryanti, R. (2022). Analysis of Teacher Skills in E-Learning Content Development During Distance Learning During the COVID-19 Pandemic. *ASEAN Journal of Science and Engineering Education, 1*(2), 131-140.
- Newby, T., Stepich, D., Lehman, J., & Russell, J. (2006). Recommended Books. *Journal of Computing in Higher Education, 18*(1), 135.
- Njie, B., & Asimiran, S. (2014). Case Study as a Choice in Qualitative Methodology. *Journal of Research & Method in Education, 4*(3), 35-40.
- O'Malley, B. (2020, November 21). *Digital Divide 'Catastrophic' for Many Students – World Bank*. University World News.
- Özer, M. (2020). COVID-19 Outbreak of the Policy Process Steps Taken by the Ministry of Education in Turkey. *Kastamonu Education Journal, 28*(3), 1124-1129.
- Özgül, M., Sarikaya, İ., & Öztürk, M. (2017). Students' and Teaching Staff's Assessments Regarding Distance Education Applications in Formal Education. *Journal of Higher Education and Science, 7*(2), 294-304.
- Patricia, A. (2020). College Students' Use and Acceptance of Emergency Online Learning due to COVID-19. *International Journal of Educational Research Open, 99*(104), 1-33.
- Pinar, M. A., & Dönel Akgül, G. (2020). The Opinions of Secondary School Students About Giving Science Courses with Distance Education During the COVID-19 Pandemic. *Journal of Current Researches on Social Sciences, 10*(2), 461-486.
- Popyk, A. (2021). The Impact of Distance Learning on the Social Practices of School Children During the COVID-19 Pandemic: Reconstructing Values of Migrant Children in Poland. *European Societies, 23*(sup1), S530-S544.
- Regmi, K., & Jones, L. (2020) A Systematic Review of the Factors, Enablers and Barriers Affecting E-Learning in Health Sciences Education. *BMC Medical Education 20*(1): 91.
- Reimers, F. M., & Schleicher, A. (2020). A Framework to Guide an Education Response to the COVID-19 Pandemic of 2020. OECD.
- Salas-Pilco, S. Z., Yang, Y., & Zhang, Z. (2022). Student Engagement in Online Learning in Latin American Higher Education During the COVID-19 Pandemic: A Systematic Review. *British Journal of Educational Technology, (Feb)*, 1-27.
- Schreiber, J. B. & Asner-Self, K. (2011). *The Interrelationship of Questions, Sampling, Design and Analysis*. Hoboken, NJ: John Wiley & Sons.
- Shaban, R. (2009). Robert K. Yin, Case Study Research: Design and Methods. *Australasian Emergency Nursing Journal 12*(5), 59-60.
- Shagiakhmetova, M. N., Bystritskaya, E. V., Demir, S., Stepanov, R. A., Grishnova, E. E., & Kryukova, N. I. (2022). Primary Teachers Difficulties Related to Compulsory Distance Education During COVID-19. *Contemporary Educational Technology 14*(2), ep357.

- Sindiani, A.M., Obeidat, N., Alshdaifat, E., Elsalem, L., Alwani, M., Rawashdeh, H., et al. (2020). Distance Education During the COVID-19 Outbreak: A Cross-sectional Study Among Medical Students in North of Jordan. *Annals of Medicine and Surgery*, 59, 186-194.
- Sözen, N. (2020). An Investigation on Distance Education Applications in the COVID-19 Process. *Eurasian Journal of Researches in Social and Economics*, 7(12), 302-319.
- Sułkowski, Ł. (2020). COVID-19 Pandemic; Recession, Virtual Revolution Leading to De-globalization? *Journal of Intercultural Management*, 12(1), 1-11.
- Sun, L., Tang, Y., & Zuo, W. (2020). Coronavirus Pushes Education Online. *Nature Materials*, 19(6), 687-687.
- Telli Yamamoto, G., & Altun, D. (2020). The Coronavirus and Rising of Online Education. *Journal of University Research*, 3(1), 25-34.
- Tian, F., Li, H., Tian, S., Yang, J., Shao, J., & Tian, C. (2020). Psychological Symptoms of Ordinary Chinese Citizens based on SCL-90 During the Level I Emergency Response to COVID-19. *Psychiatry Research*, 288, 112992.
- Tryon, P. J. & Bishop, M. (2009). Theoretical Foundations for Enhancing Social Connectedness in Online Learning Environments. *Distance Education*, 30(3), 291-315.
- Turan-Güntepe, E. (2020). *Management of Online Learning Environments*. In M. A. Özerbaş (ed.), *Instructional Technologies* (pp. 261-279). Pegem Publishing.
- Tuysuz, C., & Ugulu, I. (2021). Determination of the Satisfaction Levels of Prospective Teachers Regarding the E-Learning Application During the Coronavirus Pandemic. *European Journal of Education Studies*, 8(3), 119-134.
- UNESCO (2020, March 4). *290 Million Students Out of School Due to COVID-19: UNESCO Releases First Global Numbers and Mobilizes Response*. UNESCO.
- Wangdi, T. (2022). Perception of Parents and Students on Education in Emergencies During the COVID-19 Pandemic Under Thimphu Dzongkhag 2020. *Journal of Humanities and Education Development (JHED)*, 4(1), 27-38.
- Yau, A. H. Y., Yeung, M. W. L., & Lee, C. Y. P. (2022). A Co-Orientation Analysis of Teachers' and Students' Perceptions of Online Teaching and Learning in Hong Kong Higher Education During the COVID-19 Pandemic. *Studies in Educational Evaluation*, 72, 101128.
- Yeung, M. W., & Yau, A. H. (2022). A Thematic Analysis of Higher Education Students' Perceptions of Online Learning in Hong Kong under COVID-19: Challenges, Strategies and Support. *Education and Information Technologies*, 27(1), 181-208.
- Yıldırım, A., & Şimşek, H. (2016). *Qualitative Research Methods in the Social Sciences*. 10th Edition. Seçkin Publishing.
- Yin, R. K. (1981). The Case Study Crisis: Some Answers. *Administrative Science Quarterly*, 26(1), 58-65.