Journal of Learning and Teaching in Digital Age, 2024, **9**(2), 29-42
https://dergipark.org.tr/en/pub/joltida
ISSN: 2458-8350 (online)

Research Paper

Opinions of Teachers on Virtual Education Process of Primary School Students with Disabilities Continuing Inclusive Education

Meral Melekoğlu*[a], Ömer Faruk Ar[b], Müge Şen[c], Havva Pamuk[d] , Zekiye Tunç[e]

[a](ORCID ID: 0000-0003-4349-9959), Eskişehir Osmangazi University, Faculty of Education, Turkey, meralmelekoglu@gmail.com
[b](ORCID ID: 0000-0002-4211-2962), Necmettin Erbakan University, Institute of Educational Sciences, Turkey, omerfaruk_ar@hotmail.com
[c](ORCID ID: 0000-0002-5075-8691), Eskişehir Osmangazi University, Institute of Educational Sciences, Turkey, mugeyillmaz@gmail.com
[d](ORCID ID: 0000-0001-7653-7582), Eskişehir Osmangazi University, Institute of Educational Sciences, Turkey, havva.pamuk1881@gmail.com
[e](ORCID ID: 0000-0002-9966-2922), Eskişehir Osmangazi University, Institute of Educational Sciences, Turkey, zekiyetunc@gmail.com
*Corresponding author

ARTICLE INFO

Received: 16 July 2023
Revised: 23 September 2023
Accepted: 24 September 2023

Keywords:
Virtual education
Inclusion
Disabilities
COVID-19
Pandemic

doi: 10.53850/joltida.1328283

ABSTRACT

With the occurrence of the COVID-19 pandemic in the world in 2019, human life has moved to a different dimension. Accordingly, the education process was carried out remotely in Turkey as well as in the rest of the world. Virtual education was not a new concept for societies, but conducting the entire education process remotely was a very different practice and this practice brought many problems with it. In this context, this study aims to determine the opinions of teachers after the pandemic regarding the virtual education process of primary school students with disabilities who continue inclusive education settings. For this purpose, qualitative research was conducted and data were collected by conducting semi-structured individual interviews with 10 primary school teachers who have students with disabilities in their class. The data were analyzed by content analysis. Research results revealed that teachers did not have any problems in involving students with disabilities who were supported by their parents and who did not have any infrastructure problems in terms of technical equipment, but they have problems in including some children in virtual education. Teachers had difficulty in following the education of students with disabilities during the virtual education process implemented during the COVID-19 pandemic. As a result, it is a very important issue that our national action plans are ready for the education process of students with disabilities, especially for situations such as pandemics and natural disasters that have recently occurred in our country.

INTRODUCTION

COVID-19 is a disease that first appeared in the Wuhan Province of China and was identified on January 13, 2020, as a result of studies conducted on patients with symptoms such as fever, cough, and shortness of breath (Ministry of Health, 2020a). This disease, which spread all over the world in a very short time after its onset, was declared a "Pandemic" by the World Health Organization (WHO) as of March 11, 2020; Ministry of Health, 2020b). Under the influence of the whole world, COVID-19 first appeared in Turkey on March 11, 2020 (Öztürk & İliş, 2020). While the COVID-19 pandemic has significantly disrupted global life as of 2020 (The United Nations Educational, Scientific and Cultural Organization [UNESCO], 2020), it has caused major changes in all aspects of people's lives (Angode & Ressa, 2021). COVID-19, which caused millions of people to get sick and hundreds of thousands of people to die around the world, also had a significant impact on the fields of health, economy, transportation, production, trade, and education (Hassan, 2021).

Education is one of the areas affected by COVID-19 (Can, 2020; Gupta, 2021). During this process, more than 1.5 billion students, millions of teachers, and education personnel around the world were adversely affected due to measures such as quarantine practices and the closure of schools (Balcı, 2020). While this situation brings with it many changes for both teachers and students for the execution of education and training activities (Dhawan, 2020; Colombo & Santagati, 2022), in-person education practices from preschool to higher education level have been interrupted almost all over the world (Türkan, Leblebici, & Onal, 2020). The rapid spread of the COVID-19 pandemic, which suspended the education process at all levels of education in many countries and the need for access to a safe teaching process, has created a massive turn towards virtual education (Kougiourouki & Masali, 2022). In Turkey, which is one of the countries experiencing the negative effects of the COVID-19, in-person education has been suspended to reduce the rate of transmission of the COVID-19 pandemic, and it has been decided to apply the courses in the form of virtual education in this process (Balaman & Tiryaki, 2021; Şanlı, 2021). In the literature, providing education outside of school during the COVID-19 pandemic period was called with many different names; distance education (Özdoğan & Berkant, 2020; Stambekova, 2022); virtual education (Gupta, 2021; Şenel, 2016; The United Nations Educational, Scientific, and Cultural Organization, 2020); E-learning (Amka & Dalle, 2022). In this article the term virtual education was prefered. Distance education system can be defined as a teaching method carried out with the active use of information technology to process lessons and continue learning processes since teachers and students are at different times and places (Özdoğan & Berkant, 2020; Valentine, 2002). Şenel (2016) defined the virtual education as “a virtual learning environment (VLE) is a set of teaching and learning tools designed to enhance a student's learning experience by including computers and the Internet in the learning process”. Virtual education can be classified as (1)

computer-based, (2) internet-based, (3) remote teacher online, (4) blended learning, and (5) facilitated virtual learning. Distance and virtual education terms have similar meaning but both terms are different.

Following the suspension of in-person education in Turkey at the COVID-19 pandemic period, remote learning activities were initiated through an internet-based system called the Education Informatics Network (EBA TV), in collaboration with the Turkish Radio and Television Corporation (TRT) and the Ministry of National Education (MoNE). These activities were carried out through three separate television channels established under the name TRT EBA TV (Öztürk & Çetinkaya, 2021). Due to the negative effects of the COVID-19 pandemic on education, the virtual education system, which is compulsory, may have many advantages, as well as the inability to provide in-person interaction in learning environments, the inability to immediately intervene in the problems that may arise in the process, and the possibility of these unresolved problems to turn into bigger problems in the future (Dincer, 2006). There are also disadvantages such as not being able to socialize, not being motivated enough for the lessons (Pınar & Dönel Akgül, 2020), dropping out of school (Niemi & Kousa, 2020), and the possibility of disadvantaged students having problems in adapting to this process (Eken, Tosun, & Eken, 2020). Students who live in rural areas, have low socio-economic status, and are disadvantaged in terms of space and technology have been adversely affected by this situation (Pınarcıoğlu, Kanbak, & Önver, 2021).

Students with disabilities, one of the disadvantaged groups (Karakan, 2018), were also seriously affected by the virtual education process, which started to be implemented after the impact of the COVID-19 in the field of education (Amka & Dalle, 2022). These students are placed in certain educational environments after being evaluated in detail within the scope of special education services in Turkey (MoNE, 2018). These environments can be listed as separate special education schools or classrooms, special education and rehabilitation centers established for special support services, and environments where inclusive education is applied. The majority of students with disabilities receive special education services in settings where inclusive education is practiced. In other words, according to the 2020-2021 formal education statistics published by the MoNE, there are a total of 425,816 students in all types and levels of special education, and 319,881 of these students receive education in inclusion practices (MoNE, 2021). In other words, the vast majority of students with disabilities receive education in inclusion settings (MoNE, 2021).

Despite the widespread use of inclusion in the Turkish education system, there were many problems in schools for certain reasons when in-person education was applied (Gök & Erbaş, 2011; Sucuoğlu & Kargın, 2008). These reasons can be listed as a lack of support training room, insufficient number of experts, inadequate physical equipment, teachers' knowledge about special education practices, and crowded classrooms (Demirci, Çınar, & Demirci, 2014; Deniz & Çoban, 2019; MoNE, 2010). The most important of these problems is the inability of students with disabilities to participate effectively in classroom education activities and the inability to individualize education sufficiently (Başar & Gündüz, 2022). Therefore, the virtual education process, which was put into practice together with the pandemic for students with disabilities who are studying in inclusive settings, has turned into an inefficient application to meet the individual needs of the students (Stambekova et al., 2022). In addition, it is stated that during this process, students with disabilities studying in inclusive settings cannot adapt to the virtual education process, they get bored quickly and teachers have difficulties in motivating them remotely (Başar & Gündüz, 2022). Problems such as not being able to get the same efficiency as their classmates, difficulty in gaining knowledge and skills, and forgetting the learned information have emerged in the virtual education process. Although they differ according to the type and degree of their inadequacies, they have had difficulties in being motivated by the process, being able to stay in front of the screen, completing the studies, and learning without in-person interaction (Şenol & Yaşar, 2020). In addition to situations related to students, inclusive education conducted virtually can also be negatively affected by teachers' lack of equipment and internet connection (Parmigiani, Benigno, Giusto, Silvaggio, & Sperandio, 2020).

In the literature, there are many studies on students with disabilities who were studying in inclusive settings before the pandemic. Demir and Usta (2019), one of these studies, examined the views of classroom teachers on inclusive education. Accordingly, it was stated that teachers have a positive perspective on inclusive education, but the materials are insufficient, the methods and techniques used in the education process should be improved, and classroom teachers should be given functional training on the subject. In another study, they aimed to examine primary school teachers' views on inclusive education (Kurt & Tomul, 2020). Accordingly, it was stated that there is not enough cooperation between teachers and other stakeholders in inclusive education, in-service training and expert support are insufficient, and family awareness is low. Despite the existence of numerous studies on inclusive education before the pandemic, there is limited research available on the education process of students with disabilities who continued to receive inclusive education during the remote learning period that covered the pandemic (Başar & Gündüz, 2022; Canpolat & Yıldırım, 2021; Kast, Theresa Lindner, Gutschik, & Schwab, 2021; Stambekova et al., 2022). Başar and Gündüz (2022), one of these studies, conducted semi-structured interviews with 10 primary education classroom teachers and 10 parents with children with disabilities who received inclusive education in their study, which they aimed to identify the problems experienced by students with disabilities during the virtual education process and to develop solutions for these problems. As a result of their studies, it has been stated that students with disabilities have difficulty in adapting to the virtual education process, their motivation is low in this process, they get bored quickly in live lessons and their attention is distracted in a short time. Canpolat and Yıldırım (2021), on the other hand, conducted semi-structured interviews with eight middle school teachers from different branches working in general education settings. Their study was aiming to reveal the experiences of middle school teachers regarding emergency virtual education activities. The results of this study indicated that teachers reported the inability to implement Individualized Education Programs (IEPs) for students with disabilities enrolled in middle school. Kast, Theresa Lindner, Gutschik, and Schwab (2021) conducted a study aiming to determine the attitudes and self-efficacy beliefs of Austrian teachers toward at-risk students during the remote learning period due to the COVID-19. They worked with 3467 teachers who varied in age between 22 and 65 and were employed in different types and levels of schools. In the study, teachers filled out the scales sent to them virtually. As a result of the

study, it was stated that the teachers' self-efficacy towards the education of students with disabilities was low in the virtual education process in inclusive settings. Stambekova et al. (2022), on the other hand, conducted semi-structured interviews with 10 special education teachers in their studies where they aimed to evaluate the education of students with disabilities according to the quality of inclusive education in the virtual education process in line with the opinions of special education teachers. The research findings indicated that teachers utilized virtual lessons, video sharing, assignment monitoring, virtual activities, and mobile applications for instructional purposes during the virtual learning process. While they expressed a preference for in-person education over remote learning, they also stated that virtual education was inadequate in meeting the individual learning needs of students with disabilities. The role of teachers is of great importance in the success of students with disabilities in an inclusive education setting (Hunter-Johnson, Newton, & Cambridge-Johnson, 2014). It is stated that teachers undertake more duties and responsibilities, especially during the virtual education process (Demir & Özdaş, 2020). It is thought that knowing what kind of problems the classroom teachers experience during this process and learning their opinions about the process is of great importance in knowing the precautions that can be taken in case of such a situation in the future and the creation of legislative arrangements. There are studies in the national and international literature on the virtual education process. However, it is observed that there are limited studies conducted with general education classroom teachers who continued inclusive education during the virtual learning process and had students with disabilities (Parmigiani et al., 2020). For this reason, it is thought that this study will contribute to the literature. This study aimed to examine the participation of primary school students with disabilities who continued inclusive education in virtual learning activities during the COVID-19 pandemic. It aimed to examine the problems encountered in following lesson activities and assignments, as well as to propose solutions based on teacher perspectives. When the literature is examined, it is seen that most of the studies were carried out during the pandemic period. However, this study is unique in that it was conducted after returning to in-person education after the pandemic. Because the teachers experienced the virtual learning process while continuing in-person education and then expressed their views after returning to in-person instruction, they had the opportunity to evaluate the entire process from various dimensions. In this context, the opinions of the primary school teachers work at general education settings were examined within the framework of the research questions below.

1. According to teachers, what are the problems experienced by students with disabilities who continue inclusive education settings in participating in virtual education classes during the COVID-19 pandemic?
2. According to teachers, what are the problems experienced by students with disabilities who continue inclusive education settings while following responsibilities of virtual education during the COVID-19 pandemic?
3. What are the challenges that teachers face in including students with disabilities in virtual education process during the COVID-19 pandemic?
4. What are the challenges that teachers face in monitoring education of students with disabilities at inclusive education settings during the COVID-19 pandemic?
5. What are the suggestions provided by teachers regarding the challenges faced by students with disabilities who continue inclusive education in monitoring their virtual education during the COVID-19 pandemic?

METHOD

Research Model

The phenomenology design, which is one of the qualitative research approaches, was used in this study. Because the problems and solution proposals experienced in the process of participating in virtual education activities, following the lessons and homework during the COVID-19 pandemic process of primary school students with disabilities, and their solution suggestions are handled according to the opinions of the teachers. The phenomenology design can be defined as a research design that enables one to understand how individuals perceive predetermined phenomena, how they explain their experiences with these phenomena, and to have in-depth knowledge (Ersoy, 2016).

Participants

This research was carried out with 10 general education primary school teachers of students with disabilities in two provinces in the Marmara region. The participants of the research were determined by the purposeful sampling technique. Therefore, there were two criteria to participate in the research and these were having at least one student with officially diagnosed disabilities in his/her class and voluntary participation in the research. The researchers selected the participants based on voluntary participation from the teachers they determined in the education regions where they worked. Each participant participating in the research was given a code name T1, and T2 information about the participants is given in Table 1.

Table 1. Demographic characteristics of participants

Participant No	Teachers' Gender	Teacher Age	Grade Level of Classroom	Students' Gender	Type of Disability
T1	Male	47	3	Female	Physical disability
T 2	Female	43	4	Male	Language and speech impairment
T 3	Female	38	2	Female	Mild intellectual and developmental disability
T 4	Female	33	2	Male	Mild intellectual and developmental disability
T 5	Female	30	4	Male	Learning disability
T 6	Male	35	2	Female	Language and speech impairment
T 7	Male	40	4	Male	Mild intellectual and developmental disability
T 8	Female	36	1	Male	Language and speech impairment
T 9	Female	34	4	Female	Mild intellectual and developmental disability
T 10	Male	41	1	Male	Autism spectrum disorder

Data Collection Tool and Data Collection Process

To collect the data, the teacher interview form was developed by the researchers. There are eight open-ended semi-structured interview questions in the data collection tool. These questions were developed as a result of the relevant literature review. Then, four experts' opinion was taken from experts in the related field. After taking the expert opinion, researchers conducted a pilot interview before collecting the data to control the interview process, and questions and then the interview questions were finalized. Questions were about; (1) virtual education and training activities with students with disabilities, (2) participation of students with disabilities in virtual education classes, (3) problems encountered in the process of involving students with disabilities in virtual education classes and following their education, (4) possible problems experienced by students with disabilities while following their virtual course activities and homework (5) the reasons for the problems experienced by students with disabilities in attending virtual education classes and following their educational activities, (6) evaluating the school-family cooperation process related to the process of following the virtual education-teaching activities of students with disabilities, (7) attending virtual education processs, (8) following the educational activities during the COVID-19 pandemic and (9) teachers' suggestions for the problems experienced.

Data collection techniques that are frequently used in studies based on qualitative research designs in the literature; observation, interview, document analysis, and analysis of audio and visual materials (Yıldırım, 1999). The interview, which is the most used data collection method among the qualitative data collection methods, is a data collection technique that reveals the perspectives, experiences, and perceptions of individuals in general (Creswell, 2013). In this research, a semi-structured interview technique was used. The reason for choosing this technique was to provide flexibility to the researcher and to provide instant diversification and detailing of the data obtained from the participant.

To collect the data with the knowledge of participants; first, the day and time of the interview were planned, and then the data collection setting was determined. For this purpose, the meeting rooms of the schools where the researchers work were used. The data collection process was carried out by the researchers in 2021. The interview took between minimum 28 and maximum 35 minutes. The interviews were made in-person and the data were recorded with an audio recorder. Necessary permissions were obtained for the research.

Analysis and Reliability of Data

The data obtained in the research were analyzed by content analysis. To analyze the data and define the findings (1) deciphering the audio recordings, organizing the data, and checking the reliability of the transcripts, (2) coding the data obtained in the research and checking the reliability of the codes, (3) determining the themes of the coded data, (4) organizing the codes and themes studies were carried out (Şimşek & Yıldırım, 2013). During the data analysis process, codes were created with the in-vivo technique by reading the data files. From these codes, main and sub-themes were formed in the context of the interview questions and the findings were reported in the scope of the research questions.

In this study, opinions were taken from four experts from the special education field in the process of developing the interview question. In addition, for the reliability of this study, first at least 30% of the audio recordings were controlled by a researcher to check whether the audio records transcripts were typed correctly. The reliability data related to the transcription of the audio recordings were found to be 98%, After that the data were analyzed by one researcher and 30% of the data were reanalyzed by another researcher for intercoder reliability between the researchers. Thus, the inter-coder reliability data was 90.17% for study.

RESULTS

The findings of the research were obtained from the verbal responses of the primary school teachers participated in the research. From the findings obtained, the way teachers conduct virtual education activities, participation of students in virtual education courses, the process of teachers' inclusion of student(s) in the course and following their education, the process of following students'

virtual course activities and homework, the teacher-parent cooperation process and solution suggestions. In the context of research findings, six main themes and 15 sub-themes were created.

Findings Concerning the Ways of Teachers Carrying Out Virtual Education Courses

Two sub-themes were developed and shown in Figure 1, were named "the first works done by teachers and trying different applications to teach the courses" for the way they conducted virtual education courses with students with disabilities. Each sub-themes were explained below.

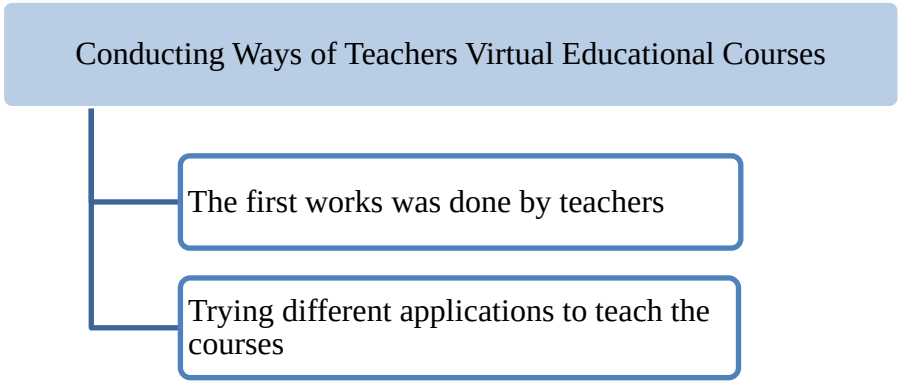

Figure 1. Conducting Ways of Teachers' Virtual Education Courses

The first Works was done by teachers

Under the sub-theme "the first works was done by teachers", teachers stated that they first informed the parents about the process and provided guidance through phone calls, taught the courses over EBA and/or Zoom platforms, and asked the parents for support for the participation of the students. T1 explained these activities as "*our first job is to contact with family."* T3 said, *"We were in constant contact with his family during this process.", and* T6 said, *"When there was a problem at EBA, we immediately connected via Zoom."*

Trying different applications to teach the courses

Under the sub-theme "Trying different applications to teach the courses", it is seen that the teachers apply to different course applications while teaching their virtual education courses. Opening a Zoom broadcast for five days so that students who need to stay at home on the days of in-person education activities can follow the lesson. Another way, providing virtual course activities for students with disabilities to attend four days and in-person courses one day a week, upon the request of the parent. Lastly, providing virtual support training, sending course activities through different platforms like WhatsApp, and asking for families to send videos to the teachers to get feedback on how they teach and support their kids at home. Among the applications that are reported by publishing on different platforms by requesting videos of students from parents and combining the incoming videos so that students feel socially together and not alone. Regarding sending lesson activities on different platforms from the reported applications, T8 said, "*I had a WhatsApp parent group. I was sharing it with them. Since most of them were first-year students, mothers were always with them. They were aware of what we were doing during the day. When I shared the activities I gave with them so that we would do them like they would work again today, they had those activities completed in their free time in the afternoon*." while T2 stated that *"… he had some difficulties in writing. There were times when he couldn't keep up with us. Then I took a photo and sent it on WhatsApp. That's how he did his homework." again T2, "We used different education sites, we reflected it."* expressed as. Regarding the practice of attending an virtual class for four days, in- person class one day, T3, "*During the in person training, the class was divided into two groups were formed. One of the groups received in-person training for two days. On the third day, the whole class received virtual learning. On the fourth and fifth days, the other group received in person training. During this practice, while other children attended in person training for two days, I took my all students with and without disabilities to in-person training for four days. And it was already remote in a day*." she explains her practice with her expressions.

Findings Regarding Students' Attendance to Virtual Courses

When the opinions of the teachers on the virtual course participation status of the students are examined, it is seen that the participation status of the students with disabilities differs. The main and sub-themes related to this finding are given in Figure 2. Each sub-themes were explained below.

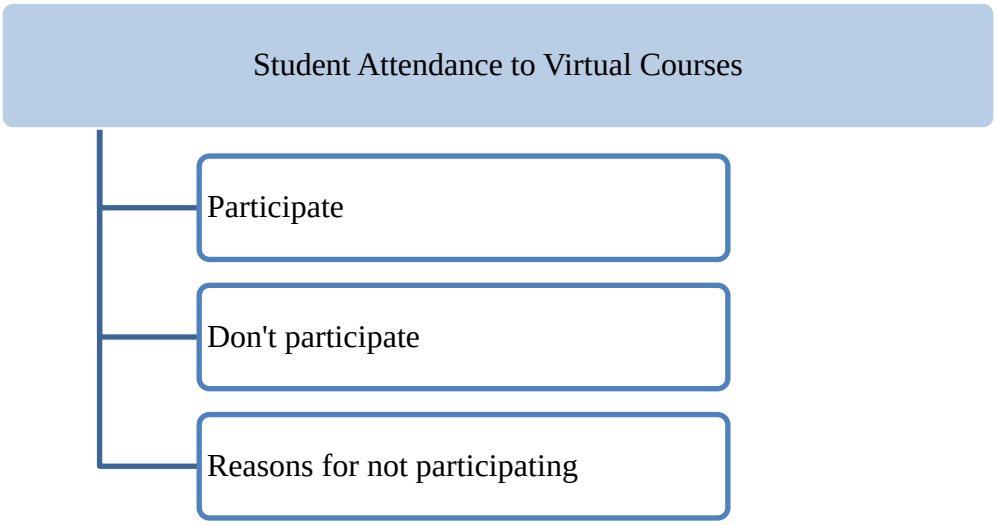

Figure 2. Student Attendance to Virtual Courses

Participate

Under the sub-theme "participate", the vast majority of teachers reported that their students with disabilities participated in virtual classes at a high rate. In this sub-theme, the codes of "high participation rate, ability to participate in independent lessons, regular attendance" were reached. T2 explained that "…*attended all classes regularly*…", and T5 said "…*attended the class regularly…*". T1 said that "*participating rate in virtual class was high. It was too high. ....He was actually falling down in his own room. He was opening his own books. We achieved this with the support of parents. He was made to attend the classes."* T3 indicated that *"we definitely did not have any problems with the continuation of the İklim last year, whether onliney or face to face. .... They kept it going. Except for illness time."*

Don't participate

According to these sub-themes, a few teachers report that students with disabilities cannot attend classes at all. T7 explained that students with disabilities could not attend the virtual classes, "*Our student's mother is illiterate. His father is old; they cannot use technological devices. There are phone and internet problems at home. For this reason, we were able to conduct in-person education with our students only during virtual education periods*".

However, it was also stated that there were students who attended only the basic courses. T4 said that *"when he was alone, he would scribble on the board, turn on the microphone without permission, and say irrelevant things. When I told the parents about this situation, they said that he could not stay in charge of it all the time. Therefore, the child's participation was very low because he could not manage this situation. So he participated in a couple times in a month"*. T5 indicated that *"I could not attend this student to a certain lesson at a certain time. So he didn't attend classes on Zoom"*.

Reasons for not participating

In this sub-theme of students' reasons for not participating in virtual classes, the codes of "giving importance to the education received in the rehabilitation center, internet connection/hardware problems, the family not following the student, attending only the basic courses, and the illiteracy of the family" were reached.

For example; regarding the code of giving importance to the education received in the rehabilitation center, T5 said, *"Maybe I can say that he did not participate in the comfort of going to special education (rehabilitation center). In other words, during the periods when he could go to special education, he could receive one-to-one education from there... So I don't think he believed in the benefit of virtual education."* used the phrases.

Regarding the code of attending only the basic courses, T9 stated that *"their financial situation and home environment were such as to allow him to attend the course. His mother was also very productive. He attended the class regularly. Only one time, the doctor did not confirm that he was constantly looking at the screen due to the use of glasses. He said that he should attend the basic lessons for a while. He did not attend the classes we did, such as traffic, human rights, painting, body, and music. He did not agree by telling them to me anyway. He attended other core courses."* made statements.

Findings Regarding the Process of Involving the Student(s) in Virtual Course and Following their Education of the Teachers

Teachers expressed different views on the process of including their students with disabilities and following their education activities. For this reason, sub-themes of experiencing problems, reasons for experiencing problems and not experiencing problems

in the process emerged as a relationship with this main theme. The main and sub-themes obtained are shown in Figure 3. Each sub-themes were explained below.

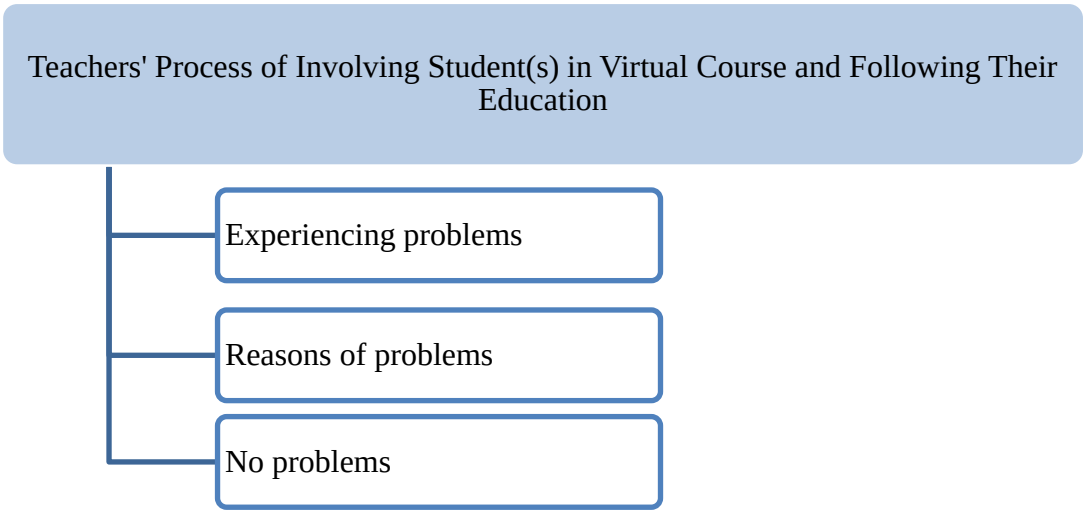

Figure 3. Teachers' Process of Involving Student(s) in Class and Following Their Education

Experiencing problems

Participants stated that they experienced some problems in the process of including students with disabilities in virtual courses and following their education. In the sub-theme of experiencing problems, the codes of "not knowing the student, socialization problems, problems with tracking homework, keeping the camera off, needing much more family support while doing homework" were reached.

Regarding the code of not knowing the student, participant T10 said, "*We couldn't prepare a full IEP plan. We do not know the child. Since we started from scratch and we were first class, I couldn't do anything for that child, we couldn't design anything.*" used the phrases. Regarding the student's code to keep the camera off, T9 said, *"...he was a very ambitious child when there was a question he did not know. He turned off his voice and camera at once. Two minutes later, he came back and said, "I fell off the internet..."*, he describes the problem he experienced during the process of including the student with disabilities in the lesson. Regarding the socialization problems code, T2 said, *"We had a lot of difficulties in terms of socializing with each other since the children did not interact much in virtual education."* used the phrases.

Reasons of problems

Another sub-theme that emerged during the process of teachers including their students with disabilities and following their education was the reasons for experiencing problems.

Within the scope of this sub-theme, the teachers stated that they could not allocate enough time for the student with disability, especially due to the large classroom sizes, so the students had less right to speak, however, various behavioral problems arose in the student with disability due to the crowded classrooms. One of the participants, T1 stated this situation *"The school we are in has a large number of people. I had forty-eight students. So that in itself created a problem. A student sometimes had the right to speak once or not. This is the biggest problem. Besides, the live lesson with forty-eight people is chaos in itself. Some students are playing in the background, you will warn them, the camera turns off, and they do not listen to the lesson."*

In addition, teachers reported that the lack of communication with parents, the limited number of interviews with the special education teacher in the rehabilitation center, and the inability to follow the student through formal/informal ways as in-person education harmed the process of knowing the progress of the students. Many of the teachers reported parent-related reasons that negatively affected the process. Regarding these reasons, codes such as *"parents' inability to provide an appropriate working setting for students, parents' tiredness/low motivation, the need for constant motivation of the family, not attending the course by giving some special reasons, not taking care of virtual courses because they received individually in person special education in the rehabilitation center"* emerged.

For example, regarding the code that parents could not provide an appropriate working setting for students, T4 said, *"The biggest problem I saw was that the child was not provided with a proper setting. All the children were in the picture. But when the microphone was turned on, their setting was not suitable at all. Only one room was not allocated. Despite warning the parents, the child tries to listen to me with the television on, telephone conversations, or chat with people where his neighbor has come. The biggest problem I experienced was the suitable conditions for the child to listen to the virtual course were not created. Otherwise, we did not have any problems with accessing the internet on tablets or computers."* used the phrases.

Regarding the code of not attending the course by giving some special reasons, T5 said *"... afterward, they had various excuses. It was a very surprising thing for them. Their social life was also affected. They said that they could not attend the classes because of their own business lives and so on when some financial and emotional difficulties arose."* expressed his statements.

No problems

The last sub-theme was having no problems. The codes of "Using EBA's activity and time tracking feature, EBA's measurement and evaluation opportunity, providing daily communication with parents, preventing problems with parent follow-up, and a positive perspective on virtual education" were included within the scope of the sub-theme "not having problems". Regarding the code to use the activity and time tracking feature of EBA, T2 said, *"There was no problem because it has to be done within a certain period in EBA. For example, we give homework from EBA. He has to complete it within a month. He watched the videos there. He always participated in events. When we entered the activity report, we had the chance to measure and see which of the children have completed or not, so we followed up from there."* used the phrases.

Regarding the code for daily communication with parents, T2 said, *"So we did not encounter any problems because I was communicating with my parents on WhatsApp daily. I'm posting the syllabus. What lessons will we do? What books do I need the next day? I didn't have a problem because the children attended the virtual class ready as I threw them daily. Since there is no problem with the connection to the internet, we were able to finish the virtual courses and used your thirty minutes efficiently."* made statements.

Findings Regarding the Process of Following the Virtual Course Activities and Homeworks of the Students

Teachers have different opinions that their students with disabilities have problems in the process of following their virtual course activities and homework. The main and sub-themes related to this are shown in Figure 4. Each sub-themes were explained below.

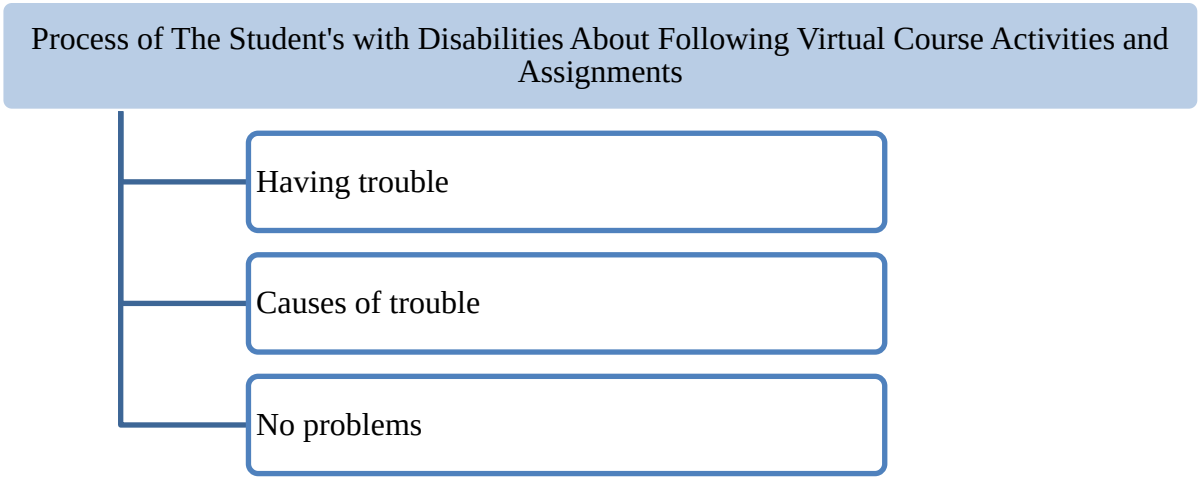

Figure4. The Process of Students about Following Virtual Course Activities and Assignments

Having trouble

In the sub-theme of the having trouble in the process of students with disabilities following the virtual course activities and homework, "students do not want to watch EBA TV, the interaction is low in virtual learning setting, there is less entertaining content during the teaching of the subjects, the teacher or friends are not visible during the lectures via Zoom, sometimes one of the participants showed problem behaviors at the virtual lesson time, T1 said about the code that students with disabilities do not want to watch EBA TV in virtual settings. *"...very few students are connected to EBA TV. ... A soulless environment... The children did not want it. So they did not participate. Very little. The parents were forced, but the children were still very bored... Because these students need to get together more one-on-one. It needs to be talked about... EBA TV has become meaningless..."* Regarding the code of the lack of entertaining content during the teaching of the subjects, T5 said, *"Perhaps these students like fun things, but doing a task on the screen or doing an assignment on the screen is not very enjoyable. However, if you shoot videos like this, if you make them fun, my student can concentrate on it carefully. That's why we couldn't benefit much from EBA in that regard."*

Causes of trouble

It is seen that being in a disadvantaged school district is among the reasons that may cause problems experienced by teachers in the process of following the virtual course activities and homework of their students with disabilities. The teachers stated that they were in a disadvantaged school district, it was found that the parents could not use technology, were illiterate parents, families could not

print their homework, and could not do their homework virtually, families with low education levels could not support students and teachers, and faced various internet-connection problems. T7 said that *"…our student's mother is illiterate. His father is old, they cannot use technological devices. There are phone and internet problems at home. There are device issues. …we were able to conduct in-person education with our students only during in-person education periods. After all, the student also has a problem of forgetting…"* T4 said, *"… when I did homework, the parents had problems like this. We can't because we can't print them out. So they were saying we can't do the homework you gave them. There could be such problems for the parents."* He stated that the parents had difficulties getting their homework printed out.

No problems

Some of the teachers stated that the students with disabilities did not have problems in the process of following the virtual course activities and homework. They said that the homework follow-up was fully ensured, the subjects were completed, and the students with disabilities received high grades in the results of the exams held after returning to the in-person terms. T2 said, *"Even though he was a student with a disability when the first semester came, he received the highest score of a hundred in almost all these exams."* On the other hand, T1 explained that he fully followed the course activities and homework *"… the family tried to support their homework as much as possible. They regularly shared their studies and assignments with me. We didn't have any problems with that either."*.

Findings Regarding Collaboration Between Teachers and Parents

It is seen that the participants encountered different problems in the teacher-parent cooperation process related to the virtual education-teaching activities of students with disabilities during the COVID-19 pandemic. They found different solutions to the problems they encountered. In this context, two sub-themes emerged concerning the main theme: teacher-parent cooperation and having problems in cooperation. The relevant main and sub-themes are shown in Figure 5. Each sub-themes were explained below.

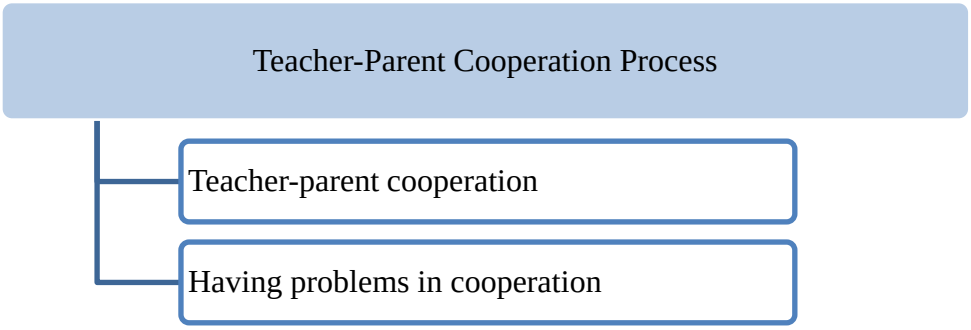

Figure 5. Teacher-Parent Cooperation Process

Teacher-parent cooperation

While the participants stated that in the presence of problems related to the cooperation with the parents in the process, they immediately communicated with the parents, and provided guidance to the parents about the student characteristics and development, and also stated that the EBA support points are active for the families who have problems in the schools and that the families who want these points benefit for their children. T1 explained this situation as *"I don't waste any time with the students with whom we have problems and behavioral problems, I contact them immediately… I call them directly with a message. First, I try to find a solution in class. I saw it doesn't work. I will meet with his parents."* On the other hand, T3 expressed that: *"As with other children, I tried to support the family when there were situations such as boredom and reluctance while doing their homework. I also spoke to the boy when appropriate. I also made frequent phone calls with the family when they wanted to get support and psychological support, such as what to do when the family is in despair, what to do during this developmental period, and if the student is getting worse. After the mother explained that when she was very stressed, she relaxed after these conversations and that the process was normal, we continued our work from where we left off."*

Having problems in cooperation

The participants reported some problems that arose during COVID- 19 pandemic regarding the cooperation of the parents. They explained that they cannot allocate the necessary time to the parents due to the crowded classrooms. They encounter the families of students with disabilities and the fact that the families do not express their needs. The government provided a mobile device for parents who are connecting for some reason to the virtual courses but the EBA support points were not used by the families in need. The fact that the problems occurred depends on the level of knowledge of the parents. T8 said *"…there is such a state of helplessness. Learned helplessness. Anyway, when we went, there was no demand… because they thought that there would be no solution that could not be helped with a solution."* he explained that students with disabilities do not express the needs of their families. T5 said, *"You know, EBA support points have been opened so that they can access the internet. So even if there was a problem at home, I think he could have entered from here, but he could not, he did not. At that point, frankly, I would like a little more support from the*

parents. I mean, I felt a little something, I felt helpless, helpless in this regard." He stated that he could not have valuable teacher-parent cooperation.

Findings Solution Suggestions for Problems Occurring in Virtual Education-Training Activities

In the main theme of the solution proposals for the problems arising in the virtual education activities carried out by the participants during the COVID-19 pandemic process, two sub-themes emerge, namely, the solutions applied and the solutions suggested. The main and sub-themes obtained are shown in Figure 6. Each sub-themes were explained below.

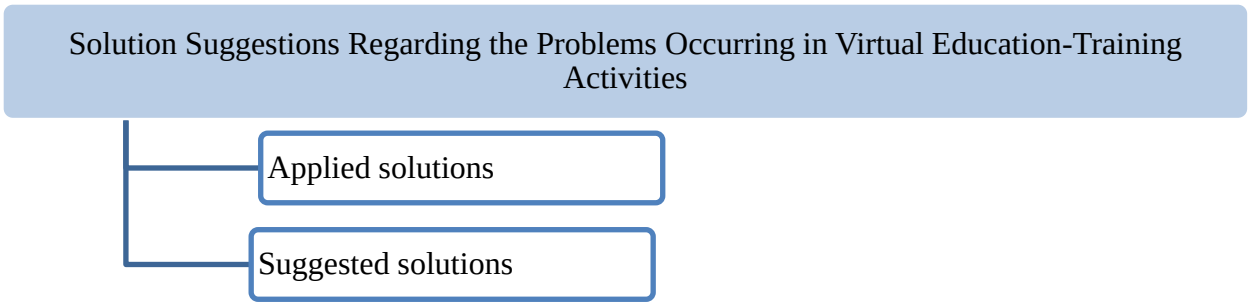

Figure 6. Solution Suggestions for Problems Occurring in Virtual Education-training Activities

Applied solutions

It is seen that teachers may encounter different problems related to each student and family with disabilities, and they resort to different solutions for these problems, specific to students and families. T3 applied a kind of hybrid education model, which offered the opportunity to follow the lesson from home on the days his student could not come due to illness, by publishing the lessons he had done in the classroom for five days when in-person education started. T2 stated that he planned to support education on any days and times that were convenient for them, through interviews with his student's family. T6 stated that for his student who is at the stage of learning to read and write, he asked the family for short video recordings during the home studies to understand whether the family is working with the student in the right way, and he evaluated these recordings with the family and made an effort to cooperate with the family and involve the family in the process. It is seen that providing support to students who do not want to attend the course and their parents through phone calls and providing motivation by making frequent phone calls when the family needs psychological support are among the other solutions.

Suggested solutions

Participants who have problems in the teacher-parent cooperation process emphasize the importance of ensuring the family's cooperation with the teacher by maintaining order and discipline at home. In addition, concerning this sub-theme, providing device and internet support for students who do not have financial means, carrying out studies for the social development of students as well as their academic development, and keeping schools open all the time so that especially children with disabilities can continue their education in the school settings, EBA support points was for all students. At the same time, codes of coordinated action were reached by using them to provide emotional motivation for students/parents with disabilities, and by communicating with rehabilitation centers. T4 said, *"If such a situation happens again, I think that the student with disabilities should be brought to the school setting. There is no order in the home settings. But when he is in a school setting, I think he will listen better with the suggestion of an administrator."* explains the code of keeping schools open all the time so that children with disabilities can continue their education in the school setting. T2 said; "*We had no problems with the main courses. But we couldn't do much in other physical education, music, and painting classes. The children got a little tired and worn out because they had to deal with academic subjects such as Turkish, mathematics, science, social, English, and religion all day. In the meantime, we could make this more fun with games soon. We couldn't do much of them. Because there is not much information about such things on the internet. It would be nice if we had known both educational games and activities that would contribute to painting, music, and physical lessons. We were able to support children academically. We are not back. But the children were not socially supported."* It gives information about the code of doing studies for the social development of students as well as their academic development. T7 said, *"There were students who had too much trouble finding a device to connect to the lesson. In particular, support could be provided to individuals with disabilities, who are in real need, that is, those with insufficient financial situation."* expressed their opinions about the code of providing device and internet support for students who do not have financial means.

DISCUSSION AND SUGGESTIONS

This study aimed to examine the problems and solution suggestions based on primary school teachers' perspectives regarding the participation of primary school students with disabilities who continue inclusive education in virtual education courses during the COVID-19 pandemic. The findings of the study indicated that certain challenges were encountered.

According to the research findings, it was determined that students with disabilities who received parental support had independent connection skills to the virtual lessons, promptly resolved technical issues with parental assistance, and had sufficient equipment

for connecting to the lessons showing a high level of participation in virtual classes. However, it was found that a small number of students could only participate in basic lessons based on doctors' recommendations, and some students were unable to attend virtual classes due to their parents' lack of literacy skills. Furthermore, it was found that some students faced challenges in following lesson activities and assignments, such as their reluctance to watch EBA TV, limited interaction in virtual learning settings, lack of engaging content during topic discussions, the absence of the teacher or classmates during zoom lessons, and behavioral issues that arose during virtual classes as well. However, it was also observed that some students did not encounter difficulties in participating in virtual lesson activities and tracking assignments during this process.

One study examining the status of inclusive education during the COVID-19 pandemic in Italy conducted research involving 785 teachers (Parmigiani et al., 2020). The study indicated that one of the factors influencing virtual inclusive courses during the COVID-19 pandemic was resulted in the lack of student participation in the lessons. While another study, Colombo and Santagati (2022) was indicating, a positive aspect of the COVID-19 pandemic was that students with disabilities had more time to complete their assignments. Kougiourouki and Masali (2022), on the other hand, stated that during the COVID-19 pandemic, the majority of students showed interest in their assignments, but the involvement, attention, and responsibility of parents in helping their children complete their assignments were determining factors. When the findings of this study and the literature are examined, it is seen that the findings of the study mostly overlap, but diverge at some points. For example, in the study of Colombo and Santagati (2022), it was observed that students used time more effectively and students were more successful whose parents helped them out similarly, it was observed that students followed their studies better especially if their families were followed up them. So, it has been determined that parents play a key role in virtual education as well as in-person education, and so their parents take roles as both parents and teachers (Ar, Şen, & Melekoğlu, 2022). Families can support their children with disabilities in various ways and while providing this support, they take on different roles at different levels (Pamuk & Melekoğlu, 2021). So, this study showed how important the parenting, teaching, and advocacy roles of families who have kids with disabilities are.

Participants expressed different views on the problems they experienced during the process of including students with disabilities in virtual classes and following their education. The teachers who expressed difficulties identified several issues, including the lack of socialization activities, problems with assignment tracking, students keeping their cameras off, and excessive reliance on family support during assignments. The underlying causes mentioned were the inability to allocate sufficient time to students with disabilities due to large class sizes, resulting in limited student participation. Additionally, the crowded class sizes led to various behavioral problems among students with disabilities. Other factors included a lack of communication between teachers and parents, limited meetings with special education teachers in rehabilitation centers, and the inability to assess students through formal or informal methods such as in-person education. Teachers, who stated that they did not experience any problems in this process, explained the reasons for not experiencing problems as the good economic level of the families, and the fact that the families followed the students and cooperated with the teacher. In a similar study, Niemi and Kousa (2020) stated in their study with high school teachers working in Finland that teachers are not sure whether their students learn or whether the learning outcomes are dependent on the education given, and they have difficulty following the students' work. In another study, Raghul, Aravind, and Rajesh (2021) stated that one of the problems faced by special education teachers during the COVID-19 pandemic, they had to force students to attend virtual classes. The existing studies in the literature and this study indicate that teachers have the most problems in the virtual education process with the children's participation in the active lesson and following them appropriately. When the literature is examined, it is seen that there are common findings in terms of the problems experienced, but there are different findings in terms of the causes of these problems.

Participants stated that they used different practices according to student and family characteristics to find solutions to the problems they encountered in following virtual education during the COVID-19 pandemic. These solutions include allowing the student to follow the virtual lessons from home on the days when they are absent due to illness, scheduling support sessions with the student's family at suitable days and times, assessing the effectiveness of the family's efforts in teaching the student to read and write by requesting short video recordings of their home study sessions. In a similar study, Gupta (2021) suggested the following solutions overcome the challenges faced during virtual classes in the context of the COVID-19 pandemic: providing training for both teachers and students on using virtual platforms, assigning short assignments of 2-3 lines to motivate students and increase their engagement, using question-and-answer techniques to assess their participation and understanding of the lessons, and ensuring necessary technological support is provided. When the findings of the Gupta (2021) study are compared with the findings of this study, it is seen that there are similar findings, but different applications are used in both studies for the problems. In the study of Gupta (2021), it is seen that teacher-centered solutions that follow the students more closely are applied, but family-centered solutions are used in this study. The reason for this difference may be the knowledge level of the teachers participating in both studies, the class size they teach, and cultural differences. In another study conducted by Türkan, Leblebici, and Önal (2020), the views of pre-service teachers regarding their experiences during the COVID-19 period were obtained. The study suggested several solutions to address the problems faced by pre-service teachers. These solutions included providing additional resources such as supplementary books, presentations, and examples related to assignments since the pre-service teachers were unable to actively participate in the classes. It was also recommended to provide additional internet packages for those experiencing internet connection and limit issues and to ensure technical support for resolving technical problems encountered during virtual teaching.

The solutions proposed by teachers regarding the problems encountered during this process include: ensuring collaboration between parents and teachers by maintaining discipline and organization at home, providing devices and internet support for students who lack financial means, conducting activities not only for students' academic development but also for their social development, keeping schools open continuously so that especially students with disabilities can continue their education in a school setting,

utilizing EBA support centers not only for students but also to support the morale and motivation of students with disabilities and their parents, and coordinating efforts with rehabilitation centers for collaborative action. In a similar study, Şanlı (2021) examined the views of English teachers regarding virtual education during the COVID-19 process. The teachers expressed their opinions on the solutions to the problems, which include addressing infrastructure issues, providing students with free internet and tablets, offering in-service training to teachers regarding virtual education, providing easily accessible materials related to lesson topics, informing parents and students about the process, and increasing the duration of educational sessions.

The suggestions for practitioners; at the beginning of the virtual education process, teachers, parents, and students should be informed about the requirements of the process. In addition, teacher and parent books and materials should be delivered to all stakeholders for the virtual education process to proceed in a planned and healthy manner. It is necessary to improve the processes related to the technological infrastructure, which may be one of the most important problems in the process, and to ensure that every student has access to these opportunities. The educational content to be prepared should be prepared in a way that parents can support, taking into account the characteristics of students with disabilities.

In line with the findings obtained within the scope of the research, the following suggestions can be made for researchers;

1. This research examined the views of teachers regarding virtual education for elementary school students with disabilities who continue to inclusive education settings. In future studies, the experiences of students with disabilities, attending different educational institutions and grade levels, could be investigated throughout the process.
2. Research can be conducted to compare the experiences of typically developing students and students with disabilities during the COVID-19 period.
3. Quantitative research can be conducted to examine the factors (such as family characteristics, socioeconomic level, level of impact from the pandemic, etc.) that contribute positively or negatively to the effectiveness of virtual education during the COVID-19 period.

Ethics and Consent: Ethics committee approval for this study was received from the Ethics Committee of Eskişehir Osmangazi University (Date: 22/03/2022; Approval Number: 2022-06).

REFERENCES

Amka, A. & Dalle, J. (2022). The satisfaction of the special need' students with E-learning experience during COVID-19 pandemic: A case of educational institutions in Indonesia. *Contemparary Educational Technology*, *14*(1). 1-19. https://doi.org/10.30935/cedtech/11371

Angode, C. & Ressa, T.W. (2021). The impact of COVID-19 pandemic on students with disabilities: A case study of kakamega county, Kenya. *Insights into Learning Disabilities, 18*(2), 121-141.

Ar, Ö. F., Şen, M. & Melekoğlu, M. (2022). The Role of the Family in Early Childhood Special Education. *Trakya Journal of Education, 12*(2), 637-646. doi: 10.24315/tred.916749

Balaman, F. & Tiryaki, S. H. (2021). Corona virüs (COVID-19) nedeniyle mecburi yürütülen uzaktan eğitim hakkında öğretmen görüşleri [Teacher opinions about compulsory distance education due to coronavirus]. *Journal of Humanities and Social Sciences Research,10*(1), 52-84.

Balcı, A. (2020). COVID-19 özelinde salgınların eğitimlere etkileri [Effects of epidemics on education, specifically COVID-19]. *International Journal of Leadership Studies: Theory and Practice, 3*(3), 75-85. https://dergipark.org.tr/tr/pub/ijls/issue/58115/772767

Can, E. (2020). Coronavirüs (COVID-19) pandemisi ve pedagojik yansımaları: Türkiye'de açık ve uzaktan eğitim uygulamaları [Coronavirus (COVID-19) pandemic and its pedagogical reflections: Open and distance education practices in Turkey]. *Journal of Open Education Applications and Research, 6*(2), 11-53. https://dergipark.org.tr/tr/pub/auad/issue/55662/761354

Canpolat, U. & Yıldırım, Y. (2021). Ortaokul öğretmenlerinin COVID-19 salgın sürecinde uzaktan eğitim deneyimlerinin incelenmesi [Examination of secondary school teachers' distance education experiences during the CovidCOVID-19 epidemic]. *Journal of Open Education Applications and Research,7*(1), 74-109. https://dergipark.org.tr/tr/pub/auad/issue/60075/840233

Colombo, M. & Santagati, M. (2022). The inclusion of students with disabilities: Challenges for Italian teachers during the COVID-19 pandemic. *Social Inclusion, 10* (2), 195-205. doi: https://doi.org/10.17645/si.v10i2.5035

Creswell, J. W. (2013). Research design: Qualitative, quantitative, and mixed methods approaches. USA: Sage.

Demir, E. & Usta, M. (2019). Kaynaştırma eğitimine yönelik sınıf öğretmenlerinin görüşleri: Karaman ilinde bir araştırma [Opinions of classroom teachers regarding inclusive education: A research in Karaman province]. *International Karamanoğlu Mehmetbey Journal of Educational Research, 1*(2), 80-98. https://dergipark.org.tr/tr/pub/ukmead/issue/51468/651652

Demir, F. & Özdaş, F. (2020). COVID-19 sürecindeki uzaktan eğitime ilişkin öğretmen görüşlerinin incelenmesi [Examining teachers' opinions on distance education during the COVID-19 period]. *National Education Magazine Special Issue,49*(1), 273-292. https://doi.org/10.37669/milliegitim.775620

Demirci, P. T., Çınar, İ. & Demirci, N. (2014). Sınıf öğretmenlerinin özel eğitime gereksinim duyan öğrencilerde beden eğitimi ders programından ve kaynaştırma eğitiminden kaynaklanan sorunlarının incelenmesi [Examining the problems of classroom teachers arising from the physical education curriculum and inclusive education for students with special needs]. *International Journal of Turkish Education Sciences, 2*(2), 136-150. https://dergipark.org.tr/tr/pub/goputeb/issue/7322/95816

Deniz, E. & Çoban, A. (2019). Kaynaştırma eğitimine ilişkin öğretmen görüşleri [Teacher opinions on inclusive education]. *Electronic Journal of Social Sciences18*(70), 734-761. doi:10.17755/esosder.448379

Dhawan, S. (2020). Online learning: A panacea in the time of COVID-19 crisis. *Journal of Educational Technology Systems, 49*(1), 5-22. https://doi.org/10.1177/0047239520934018

Ersoy, A. F. (2016). Fenomenoloji. A. Saban & A. Ersoy (Ed.), Eğitimde nitel araştırma desenleri içinde (s. 51-109) [within qualitative research designs in education]. Ankara: Anı.

Gök, G. & Erbaş, D. (2011). Okul öncesi eğitimi öğretmenlerinin kaynaştırma eğitimine ilişkin görüşleri ve önerileri [Opinions and suggestions of preschool education teachers regarding inclusive education]. *International Journal of Early Childhood Special Education, 3*(1), 66-87.

Gupta M. M. (2021). Impact of coronavirus disease (COVID-19) pandemic on classroom teaching: Challenges of virtual classes and solutions. *Journal of Education and Health Promotion*, 10, 155. https://doi.org/ 10.4103/jehp.jehp_1104_20

Hassan, M. (2021). Virtual teaching challenges during COVID-19 pandemic. *International Journal of Information and Education Technology, 11*(1), 41-46. doi: 10.18178/ijiet.2021.11.1.1487.

Hunter-Johnson, Y., Newton, N.G.L. & Cambridge-Johnson, J. (2014). What does teachers' perception have to do with inclusive education: A Bahamian context. *International Journal of Special Education, 29*(1), 143-157.

Karakan, B. (2018). Türkiye'de Sosyal Dışlanma ve Dezavantajlı Gruplar: Engelliler Üzerine Tanımlayıcı Bir Çalışma [Social Exclusion and Disadvantaged Groups: A Descriptive Study on People with Disabilities] (Thesis No: 514383] (Master Thesis, Hacettepe University Tezi), Council of Higher Education National Thesis Central.

Kast, J., Theresa Lindner, K., Gutschik, A. & Schwab, S. (2021) Austrian teachers' attitudes and self-efficacy beliefs regarding at-risk students during home learning due to COVID-19. *European Journal of Disabilities Education, 36*(1), 114-126, doi: 10.1080/08856257.2021.1872849

Kougiourouki, M. & Masali, Z. (2022). Homework during emergency remote education (ERE) due to COVID-19 pandemic: Teachers' perceptions. *American Journal of Educational Research, 10*(7), 425-458. doi:10.12691/education-10-7-4

Kurt, A. & Tomul, E. (2020). Sınıf öğretmenlerinin kaynaştırma eğitimine ilişkin görüşlerinin incelenmesi [Examining the opinions of classroom teachers regarding inclusive education]. *Journal of Interdisciplinary Educational Research, 4*(7), 144-154.

Ministry of National Education. (2021). Milli eğitim istatistikleri örgün eğitim [National education statistics formal education]. https://sgb.meb.gov.tr/www/resmi-istatistikler/icerik/64.

Ministry of National Education. (2010). İlköğretim okullarındaki kaynaştırma uygulamalarının değerlendirilmesi [Evaluation of inclusion practices in primary schools]. https://www.meb.gov.tr/earged/earged/ilk_kaynas_eg_uyg_deg.pdf

Ministry of National Education. (2018). Özel eğitim hizmetleri yönetmeliği [Special education services regulation]. https://orgm.meb.gov.tr/meb_iys_dosyalar/2018_07/09101900_ozel_egitim_hizmetleri_yonetmelig i_07072018.pdf.

Niemi, H. M. & Kousa, P. (2020). A case study of students' and teachers' perceptions in a Finnish high school during the COVID pandemic. *International Journal of Technology in Education and Science (IJTES), 4*(4), 352-369. doi: https://doi.org/10.46328/ijtes.v4i4.167

Özdoğan, A. & Berkant, H. (2020). COVID-19 pandemi dönemindeki uzaktan eğitime ilişkin paydaş görüşlerinin incelenmesi [Examining stakeholder views on distance education during the pandemic period]. *National Education Journal*,13-43. https://doi.org/ 10.37669/milliegitim.788118

Öztürk, B. & Çetinkaya, A. (2021). Pandemi döneminde bir eğitim aracı olarak televizyon: TRT EBA TV [Television as an education tool during the pandemic period: TRT EBA TV]. *Inönü University Faculty of Communication Electronic Journal, 6*(1), 140-162. https://doi.org/10.47107/inifedergi.886813

Öztürk, S. & İliş, B.E. (2020). Koronavirüs hastalığı 2019 (COVID-19) küresel salgının, ortaya çıkmasından itibaren meydana gelen önemli olayların kronolojisi [Chronology of important events that have occurred since the emergence of the coronavirus disease 2019 (COVID-19) global epidemic]. https://cdn.istanbul.edu.tr/FileHandler2.ashx?f=COVID19_kronoloji_enformatik_by.pdf

Parmigiani, D., Benigno, V., Giusto, M., Silvaggio, C. & Sperandio, S. (2020). E-inclusion: virtual special education in Italy during the COVID-19 pandemic. *Technology, Pedagogy and Education, 30*(1), 111–124. doi:10.1080/1475939x.2020.1856714 10.1080/1475939x.2020.1856714

Pamuk, H., & Melekoğlu, M. (2021). The advocacy role of families from past to present in special education [The advocacy role of families from past to present in special education]. *Mersin University Journal of the Faculty of Education, 17*(3): 557-569. doi: 10.17860/mersinefd.938088

Pınar, M. A. & Dönel Akgül, G. (2020). The opinions of secondary school students about giving science courses with virtual education during the COVID-19 pandemic. *Journal of Current Researches on Social Sciences, 10*(2), 461-486.

Pınarcıoğlu, N.Ş., Kanbak, A. & Şiriner Önver, M. (2021). COVID-19 pandemisi sürecinde kırsal-kentsel ve sosyo-ekonomik farklılıkların uzaktan eğitime etkisi [The impact of rural-urban and socio-economic differences on distance education during the pandemic]. *MSGSÜ Journal of Social Sciences,1*(23), 28-48.

Raghul, E., Aravind, B.R. & Rajesh, K. (2021). Difficulties faced by special education teachers during COVID-19 pandemic. I*nternational Journal of Early Childhood Special Education, 13(2), 1245-1251.*

Sağlık Bakanlığı. (2020a). COVID- 19 nedir? [What is COVID-19]. https://COVID19.saglik.gov.tr/TR-66300/COVID-19-nedir-.html

Sağlık Bakanlığı (2020b). COVID- 19 bilgilendirme platform [information platform]. https://COVID19.saglik.gov.tr/TR-66494/pandemi.html

Stambekova, A., Zhakipbekova, S., Tussubekova, K., Mazhinov, B., Shmidt, M. & Rymhanova, A. (2022). Education for the disabled in accordance with the quality of inclusive education in the distance education process. *World Journal on Educational Technology, 14*(1), 316-328. https://doi.org/10.18844/wjet.v14i1.6760

Sucuoğlu, B. & Kargın, T. (2008). İlköğretimde kaynaştırma uygulamaları. Yaklaşımlar, yöntemler, teknikler [Inclusion practices in primary education. Approaches, methods, techniques]. Istanbul: Morpa Culture Publications.

Şanlı, Ö. (2021). English teachers' views on distance education in the COVID-19 pandemic process. *Education Quarterly Reviews*, *4*(1), 339-353. doi: 10.31014/aior.1993.04.02.250

Şenol, B. F. & Yaşar, C. M. (2020). COVID-19 pandemisi sürecinde öğretmen ve ebeveyn gözünden "özel eğitim" ["Special education" from the perspective of teachers and parents during the COVID-19 pandemic]. *National Education Journal, 49*(1), 439-458. doi: https://doi.org/10.37669/milliegitim.787808

Şenel, M. (2016). Virtual Learning Environments (VLE) and Virtual classrooms: Edmodo. Participatory Educational Research (PER), Special Issue, 49-57. https://dergipark.org.tr/tr/download/article-file/778408

Türkan, A., Leblebici, H. & Önal, İ. (2020). Opinions of teacher candidates on virtual education implemented during the COVID-19 pandemic period. *European Journal of Education Studies*, *7*(11), 329-353.

The United Nations Educational, Scientific and Cultural Organization. (2020). *Startling digital divides in virtual learning emerge.*https://www.unesco.org/en/articles/startling-digital-divides-virtual-learning-emerge

Valentine, D. (2002). Distance learning: promises, problems, and possibilities. Online Journal of Distance Learning Administration, 5(3). *http://www.westga.edu/%7Edistance/ojdla/fall53/fall53.html*

Yıldırım, A. (1999). Nitel Araştırma Yöntemlerinin Temel Özellikleri ve Eğitim Araştırmalarındaki Yeri ve Önemi [Basic Characteristics of Qualitative Research Methods and Their Place and Importance in Educational Research]. *Education and Science, 23*(112). http://213.14.10.181/index.php/EB/article/view/5326

Yıldırım, A., & Şimşek, H. (2013). Sosyal bilimlerde nitel araştırma yöntemleri [Qualitative research methods in the social sciences]. (9. Baskı). Ankara: Seçkin

Yüksel Başar, A. & Gündüz, Y. (2022). COVID-19 Pandemi Sürecinde özel gereksinimli öğrencilerin uzaktan eğitim yaşantılarına ilişkin öğretmenlerin ve ailelerinin görüşlerinin incelenmesi [Examining the opinions of teachers and their families regarding the distance education experiences of students with special needs during the COVID-19 Pandemic Process]. *International Anatolian Journal of Social Sciences,6*(2), 643-662. https://doi.org/10.47525/ulasbid.1074457