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Abstract: The COVID-19 pandemic, which began in December 2019 and quickly spread throughout the world, led to the closure of the world as well as our country and affected all sectors, including the education sector. As a result of the impact of COVID-19, face-to-face education was interrupted all over the world and distance education systems were initiated. During this whole process, various problems occurred in education; consequently, this study aims to investigate the opinions of teachers in primary schools in TRNC working during this time to determine the nature of these problems. Information was gathered using the qualitative research scanning model; for this purpose, an easily accessible sample group selected on a volunteer basis was studied and their views on the subject were determined using a semi-structured interview form. The data obtained from the research were analysed by content analysis.

Keywords: COVID-19 distance education; COVID-19 distance education teacher opinions; distance education in TRNC.

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1 Introduction

The novel coronavirus (COVID-19), which emerged in Wuhan, China in December 2019 and spread rapidly all over the world and is regarded as an infectious and dangerous virus by the World Health Organization, also spread in our country with the announcement of the first case in March 2020. As of March 10, 2020, our country has taken the necessary precautions, and the decision was made to close institutions and schools. Considering that some losses of information occurred in education, particularly in the first two weeks of this process and students were distanced from education, this revealed that distance education should have been started as soon as possible, albeit at a certain level.

According to Kaçan and Gelen (2020), distance education originally started when written materials were sent to remote individuals, a practice that dates back to ancient times, and with the development of technology, it has become quite widespread and is performed both synchronously and asynchronously. Investments are made in distance education applications in many parts of the world, and these applications are continually developing. In the research conducted by Yalın (2001), distance education was defined as a system in which teaching-learning activities can be carried out mutually, enabling teachers and students in different places to interact with the help of various communication technologies, to provide educational services to wider audiences, and to ensure equal opportunities in education. In this process, the priority of all countries is to prevent losses in the learning process. Based on the announcements made by the school principals, a joint study was conducted to form commissions of each class consisting of volunteer teachers within the Ministry of National Education and Culture of the Turkish Republic of Northern Cyprus (TRNC) (MoNEC), which is the relevant ministry in this context. It was observed that commissions created for the specified purposes began to publish videos with lectures and questions on the website of the MoNEC in such a way that they were related to the curriculum in accordance with the available resources. In order to ensure that the presentations prepared in a short time were accessible to all individuals, attempts were made to reach wider audiences by making certain announcements. Some of these announcements were made on March 29, 2020 from administrators and teachers' own accounts for students to listen to their relevant lessons, while others were announced on the web pages of the schools.

After all announcements were made, it can be assumed that the distance education process for primary education in the TRNC began on March 30, 2020. With the addition of MoNEC and the television channel BRT in preparations, it was decided that the lectures published on MoNEC's website would provide convenience to the students who do not have internet access, and the courses should also be broadcast on television. As this was the first time such a pandemic process had impacted our country, the aim was to reach a broader community by using the social media channels. The decision by the Ministry to make an announcement using the social media tool to provide the relevant course flow suggests that it prevented students from moving further away from education. The fact that this type of education, which was implemented in the transition to distance education and was designed using the available resources, is one-sided and does not provide equal opportunities in education, reveals the problems experienced in this process. Problems associated with the lack of equal opportunities have been identified as students lacking access to a computer or the internet to benefit from distance education at home, or the inability to access the relevant channel where the course flow is provided due to television satellite problems. Given that teachers are attempting to teach in an asynchronous way with different applications and their own personal efforts, it can be stated based on the relevant literature that the distance learning method can be implemented in two different ways: online synchronous or offline asynchronous (Kurnaz and Sparçemeli, 2020). In the synchronous education method, which is conducted in environments where teachers and students are present at the same time, the active participation of the student is provided with video conferences, and the student can ask questions to the teacher at that time. In this context, when both methods are compared, the online synchronous method is considered more beneficial than the asynchronous method since it is performed synchronously (Solak et al., 2020). In the research conducted by Woods (2005), it was observed that the students were satisfied with the

distance education based on the video conferencing system and they also stated that they wanted to participate in such applications again.

Countries have endeavoured to take measures with different practices to ensure the continuity of learning. In China, which was the first country to experience the COVID-19 pandemic and played a critical role in developing a model plan for other countries in the field of education as well as in all areas during the pandemic process, it was observed that 30 million students from primary school to higher education level were given distance education and teachers were prepared for this type of education During the COVID-19 pandemic, in which countries have adopted different policies to overcome the challenges, it was observed that students living in rural areas of China did not have adequate connections to participate in distance education (Lau et al., 2020).

Based on an examination of Italy, which was the country most affected by COVID-19 in Europe, it was seen that an information portal was created to make distance learning more effective, and education was provided through this resource (Benu, 2020). When the impact of the COVID-19 impact on Turkey was examined, which has a parallel education system and is geographically the most similar, it was found that the preparations made with the closure of schools for the distance education process were completed in a very short time and the distance education was provided via the Educational Informatics Network (EBA) platform, which has been used along with the courses offered at schools by the Ministry of National Education (MoNE) in Turkey since the 2011–2012 academic year, as well as TRT national broadcasting TV channels. In this regard, the education prepared asynchronously from pre-school to high school level was prepared and broadcasted on TRT according to a certain program flow (Özer, 2020).

Looking at the distance education applied in our country during the pandemic period, it can be seen that the asynchronous education method managed by the MoNEC has been applied. Asynchronous education, which is not simultaneous, is a form of instruction that allows easy access to everyone by eliminating the barriers of time and space, thus allowing students to access tools through which they can participate in education, learn offline and share resources many times (Simonson and Schlosser, 2009). Therefore, learning with an asynchronous education method is thought to be dependent on the student's own effort. In this process, the supervision and evaluation of the students were conducted involving both the students and their families in the process. In a study conducted by Şahin (2010), it was stated that the asynchronous system is an education system that does not require two-way interaction between teacher and student and eliminates the limitations of time and space. In the case of a possible pandemic, it is thought that it is important to know and solve the problems experienced, not only in terms of the evaluation of education, but also in terms of the sustainability of the education applied. It is also expressed that monitoring and determining the outcomes of the process applied in distance education and the benefits it provides are critical factors in determining the successful application of the system (Şahin, 2007).

For this purpose, in this study, teachers' opinions on the problems experienced in education in primary schools affiliated with the MoNE during the period of the COVID-19 pandemic period were discussed and answers were sought to the following questions.

1   What are the teachers' views on distance education applied for primary education during the COVID-19 pandemic?

2   What are the teachers' views on evaluating the effect of video lectures published in the distance education process on students?

3   What are the teachers' opinions about transferring the online education conducted on the internet to the television during the COVID-19 pandemic?

4   What can be done to increase efficiency in the teaching given?

5   What are the problems observed as a result of the teaching given?

6   What do you think can be done to solve these problems that arise?

It is important to examine teachers' views on distance education implemented by the TRNC MoNE during the COVID-19 pandemic, to understand the problems experienced as well as to determine what methods can be used to improve the quality of distance education. It is believed that the problems experienced in distance education can be minimised by considering similar opinions.

According to the literature, various studies have been conducted on the subject of distance education throughout the world. However, since COVID-19 is a new situation for which countries were largely unprepared, it can be said that the amount of resources available is quite limited. In a study conducted by Daniel (2020) to guide teachers, corporate administrators, and officials on distance education to be implemented during the period of the COVID-19 pandemic, it was stated that in order to increase the distance teaching capacity, schools should benefit from asynchronous learning, which functions optimally in digital environments.

In their study, Yamamoto and Altun (2020) examined examples from around the world of how education has been converted into distance education during the COVID-19 pandemic and predicted that distance education would become the main basis of education, rather than being an alternative to face-to-face learning. In their research to determine the institutions that would be affected by school closures and to determine how poor children in the USA and Europe are affected by the COVID-19 pandemic, Van Lancker and Parolin (2020) noted that teachers should choose appropriate materials when planning distance education and an alternative method should be developed for students who do not have an internet connection.

2   Methodology

This research study uses a descriptive survey model, which is a research method, in order to examine teacher opinions about problems experienced in education during the period of the COVID-19 pandemic in the TRNC. Qualitative research is defined as the types of research in which qualitative data collection methods such as observation, interview, and document analysis are used, perceived, and a process for realistically and integrally revealing events in a natural environment is followed (Balcı, 2015). Since its aim is to determine the relationships between events and the evaluations in the descriptive survey model and shed light on the existing situation or event (Büyüköztürk et al., 2012), it tries to examine the situation in the research as it is, and therefore, the surveying model was applied in this study.

2.1 Research population and sample

A screening model, which is a qualitative screening method, was selected to better identify existing situations in the study. In this context, convenience sampling was used to determine the study group that best represented the research population. The study group of the present study consisted of 100 teachers who were working in TRNC primary schools in the 2019–2020 academic year.

The categorisation of the gender, educational status, and teaching experience of the participant teachers are shown in Tables 1–3.

Table 1 Gender of the participants

Gender	Number of participants	Percentage
Female	66	66%
Male	34	34%
Total	100	100%

When the findings related to the gender variable are examined in Table 1, it is seen that 66 out of 100 participant teachers in the study were female, and 34 were male.

Table 2 Educational status of the participants

Educational status	Number of participants	Percentage
Bachelor's	78	78%
Master's	21	21%
PhD	1	1%
Total	100	100%

Examining the educational status variable in Table 2, in which the number and percentages of the participants are indicated, it is seen that 78% of the participant teachers had a bachelor's degree, 21% had a master's degree, and 1% had a PhD degree.

Table 3 Teaching experience of the participants

Professional experience	Number of participants	Percentage
1–5 year(s)	8	8%
6–10 years	35	35%
11–20 years	32	32%
20 years and more	25	25%
Total	100	100%

When Table 3 containing the findings of the professional experience variable is examined, it is indicated that 8% of the participant teachers have 1–5 years of experience, 35% have 6–10 years, 32% have 11–20 years, and 25% have 20 years or more.

2.2 Data collection tool

A semi-structured interview form developed by the researchers was used as a data collection tool. When using a semi-structured interview form, the interviewer prepares

their questions about the subject in advance, provides flexibility to the participant during the interview, and they are allowed to rearrange the questions and discuss the subject if necessary. In this way, an environment where the participants have a say in the research process is created (Berg and Lune, 2019). In the form used in this study, six open-ended questions were used to determine the opinions of the teachers and their suggestions about the relevant topic.

2.3   Data analysis

Content analysis was used to analyse the research data. By collecting similar data with content analysis, it is possible to analyse the data objectively and systematically describe it in quantitative ways within the framework of certain concepts and themes on the basis of words, gathering them under certain components and interpreting them (Yıldırım and Şimşek, 2011). Additionally, a descriptive analysis technique with direct quotations was used to draw attention to the opinions of teachers participating in the study. With the descriptive analysis technique, direct quotations are occasionally made to convey the opinions of the teachers effectively (Türnüklü, 2000). Quotations of teacher's opinions are shown by coding them as T1, T2, …, T100.

2.4   Validity and reliability

While developing the semi-structured interview form used in the study, the literature was scanned and expert opinions were sought. In the re-arranged form, some items were arranged in line with the recommendations of the experts and incomprehensible items were removed. The frequency of the opinions of the individuals who voluntarily participated in the study was determined, and the data obtained for each opinion was digitised as this increased the validity and reliability of the study.

3   Findings

In this section, participant teachers' opinions about the problems related to education in primary education institutions were interpreted by applying content analysis through semi-structured interview forms, and these opinions were analysed in tables.

Table 4   Teachers' opinions on distance education applied to primary education in our country during the COVID-19 pandemic

		Frequency	*Percentage (%)*
Distance education opinions applied to primary education in the COVID-19 process	Sufficient	50	50%
	Insufficient	37	37%
	Needs improvement	13	13%
Total		100	100%

An examination of Table 4 reveals that 50% of the teachers participating in the study found the distance education applied in our country during the COVID-19 pandemic to be sufficient. While explaining this sufficiency, they expressed that distance education is a successful, useful, efficient, and effective form of education.

Table 4 shows that 37% of the teachers involved in the study expressed that distance education implemented during the COVID-19 pandemic was insufficient, and they described the state of inadequacy by using words such as failed, useless, inefficient, and worse.

In the third theme of Table 4, it is seen that the teachers' suggestions for improvement mention the existence of fixable problems with respect to distance education. Teachers participating in the study expressed this situation in the following ways:

- Teacher 98 (female, master's degree, 20 years or more experience) "There are students who do not have internet access. This can create unequal opportunities. I think it needs further development."

- Teacher 10 (female, bachelor's degree, more than 20 years' experience) "I think it is as good as it can be, we just have a lack of supervision and assessment."

- Teacher 23 (female, master's degree, 6–10 years' experience) "A certain number of teachers make the effort, but the application of distance education online could increase the efficiency much more, and it would be more effective in increasing the participation rate of the students."

- Teacher 35 (female, bachelor's degree, 6–10 years' experience) "It would be more successful if it was more organized and the classroom environment was created." Irrespective of the education status and professional experience variables, 50% of female and male teachers stated that the distance education applied in our country is effective and efficient.

Table 5 Teachers' opinions regarding the effect of video lectures published as part of the distance education process on students

		Frequency	*Percentage (%)*
Teachers' opinions regarding the effect of video lectures published during the distance education process on students	Positive	36	36%
	Negative	35	35%
	Needs improvement	29	29%
Total		100	100%

When Table 5 is examined, it can be seen that 36% of the participant teachers stated that video lectures in distance education published in our country during the COVID-19 pandemic have a positive effect on students. While explaining this positive effect of videos, they used sentences indicating that they are useful, effective, sufficient, and interesting. These quotations are as follows:

- Teacher 100 (male, master's degree, 11–20 years) "I think it is interesting because it is the first time we encountered it."

- Teacher 95 (male, bachelor's degree, 11–20 years) "Video education has been effective because it also includes visuals."

- Teacher 65 (female, bachelor's degree, 6–10 years) "The video lectures, which were created and presented by the teachers in a home environment with limitations, were prepared by considering the age group of the students, although not like the

one-to-one classroom environment. I think this got the students attention because it was the first time they had encountered it."

As can be seen in Table 5, 35% of the teachers were included in the negative category. While explaining the negative effects of videos on students, teachers used sentences containing the words unsuccessful, useless, inefficient, ineffective, and boring. Some of these opinions are as follows:

- Teacher 11 (male, bachelor's degree, 1–5 years) "I think it was insufficient to

- attract attention. The children became tired after a while and stopped listening and following."

- Teacher 19 (female, bachelor's degree, 20 years and more) "The lectures were boring and did not attract the attention of the children."

- Teacher 25 (female, bachelor's degree, 11–20 years) "A few of the children were motivated and followed these videos. The vast majority of them were not interested and couldn't follow the videos."

- Teacher 54 (female, bachelor's degree, 6–10 years) "We came across quick lecturing in which some simple subjects were taught at length and some of them contained 3–4 units in a short lecture video. The part that was most lacking was definitely not being able to get feedback or ask questions. There were a lot of worksheets, but the answer keys were missing."

- Teacher 81 (male, bachelor's degree, between 11–20 years) "I think it is an application that is abstract because it is difficult to perceive for children and it is not reinforced."

In the recommendations for improvement, the third category of Table 5, there are some suggestions that teachers have made regarding the subject. Some of the teachers 'suggestions on the subject are stated as follows:

- Teacher 10 (female, bachelor's degree, 20 years and more) "The video lectures are nice, but since there is no one-to-one communication, it is not possible to get feedback and explain the unknown parts with another method."

- Teacher 41 (female, bachelor's degree, 6–10 years) "I think it can be effective in simply repeating a subject they know because it is not interactive."

- Teacher 59 (female, bachelor's degree, 6–10 years) "Good, but I think it is more useful when primary school students interact with a teacher on a one-to-one basis on this subject.

When the opinions were examined, it was seen that regardless of gender, teachers with bachelor's degrees, master's degrees, and PhDs stated that, education could be given simultaneously, interactively, and it could be more beneficial in that way.

In Table 6, when the opinions of teachers about transferring the online education on the internet in our country to the television during the COVID-19 pandemic are examined, it is seen that the highest percentage was 66% in terms of reaching more students and ensuring equal opportunities. It can be said that by broadcasting lessons on television, particularly students who do not have a computer or internet access at home

are able to become one step closer to distance education. In addition, some of the participants' opinions on this subject are as follows:

- Teacher 92 (female, bachelor's degree, 20 years and more) "Broadcasting on TV was better. Those who do not have the internet also had the opportunity to watch the videos."

- Teacher 89 (female, master's degree, 6–10 years) "It was much better. Some more students had the chance to follow it. It was definitely the right step."

- When Table 6 is examined, it can be seen that 13% of the teachers believed that starting to broadcast distance education on television was insufficient. In this context, some of the teachers' opinions are as follows:

- Teacher 84 (male, bachelor's degree, 11–20 years) "It was ineffective. They couldn't get down to the levels of primary school students."

- Teacher 28 (male, bachelor's degree, 6–10 years) "I evaluated it as 'Cold Education.' I don't think it has many benefits."

When Table 6 is examined, it is found that 10% of the teachers participating in the study found the television broadcasting of distance education to be effective.

Table 6   Teachers' opinions about transferring the online education conducted on the internet to television during the COVID-19 pandemic

		Frequency	*Percentage (%)*
Teachers' opinions about transferring the online education conducted on the internet to television during the COVID-19 pandemic	Reaching more students and ensuring equal opportunities	66	66%
	Unable to access the TV channel	6	6%
	Effective	10	10%
	Insufficient	13	13%
	Asynchronous Internet and television broadcast streams	4	4%
	Problems caused by course content being published a week late	1	1%
Total		100	100%

In this table, it can be seen that with a frequency of 6%, teachers said that their students could not access the television channel on which distance education was broadcast. This was due to the lack of infrastructure in terms of satellite television channels in our country.

- Teacher 90 (female, bachelor's degree, 6–10 years) "Broadcasting it via a single channel caused confusion. It has become difficult to catch the broadcast stream. At the same time, although we sent the channel frequency settings to many parents, they continued their education over the internet because they could not adjust the channel frequency settings."

In Table 6, the response "Asynchronous internet and television broadcast streams" has a percentage of 4%. In this regard, it can be said that teachers expressed that they experienced problems due to the fact that the broadcasts from the internet and television

were not synchronised. When the table is examined, it can be seen that 1% of teachers were included in the category 'problems caused by course content being published a week late'; the prepared lecture notes and videos were first published on the internet and then on the television one week later, so this created problems for both students and teachers. When the opinions of the participant teachers about transferring prepared video lectures to television broadcasts were examined according to the professional experience variable, it was seen that they thought this practice was useful.

Table 7   Teachers' opinions on the actions that can be taken to increase efficiency in the given teaching

		Frequency	Percentage (%)
Teachers' opinions on the actions that can be taken to increase efficiency in the given teaching	Live, online, synchronous, interactive lessons	33	33%
	Ensuring completely equal opportunities by providing the necessary technological infrastructure	15	15%
	Management, supervision, and evaluation by classroom teachers	15	15%
	Active involvement of families in the process	6	6%
	Paying attention to the use of effective and efficient tools and equipment	2	2%
	Educating teachers, students, and families on the subject	10	10%
	Designing the lesson to be more interesting and fun	10	10%
	Increasing the quality of online course service	1	1%
	Including more repetition and reinforcement	8	8%
Total		100	100%

In Table 7, the teachers' opinions on the actions that can be taken to increase efficiency in the given teaching are shown, and it is seen that the highest percentage was in lessons held in live, online, synchronous, and interactive ways with a 33% frequency. A 15% frequency is observed for the category of ensuring complete equality of opportunity by providing the necessary technological infrastructure. Similarly, another category with a 15% frequency is the category specified for management, supervision, and evaluation by classroom teachers. It is thought that classroom teachers in particular should play an important role in implementing the process whereby every teacher can supervise, manage, and evaluate their own classroom in distance education.

Considering that the category of educating teachers, students, and families on the subject had a 10% frequency, it is seen that teachers should first receive the necessary training about distance education and then learn how it can be transferred into their classroom. Along with the teachers, it is important to inform students and parents, who are additional stakeholders in education, about distance education and how it can be put into practice. Some of the teachers' opinions on the subject are as follows:

- Teacher 5 (female, bachelor's degree, 11–20 years) "Training should be given to inform families about the use of technological tools. They should be informed about how to help their children."

- Teacher 38 (female, bachelor's degree, 20 years and more) "In-service training should be provided on online education."

The table shows that the category related to making the design of the lessons more interesting and enjoyable had a frequency of 10%, which shows that this category gains more meaning when the age and interests of primary school children are considered. In this context, it shows that the objects that attract the attention of children in primary school age according to their ages are important for a better understanding of the subjects. Dale (1946, 1954, 1969), a psychologist who worked on experiential learning, stated in his study that the more a person is exposed to various stimuli, the greater the permanence of learning. When the table is examined, it is seen that 8% of the participants agreed with the category of "Including more repetition and reinforcement," and some of the teachers' opinions on this issue are as follows:

- Teacher 48 (male, master's degree, 11–20 years) "More activities, topic repetitions, and examples should be available."

The table shows that the category "Active participation of the family" had a 6% frequency, which indicates that educational support should be provided to the student through the cooperation of the teacher and the student's family. One of the teachers' opinions on the subject is expressed as follows:

- Teacher 36 (female, bachelor's degree, 20 years and more) "I think it is very important to raise awareness of families about this and include them in the process."

It can be said that 2% of the participants are in the category of paying attention to effective and efficient use of tools, which indicates that the tools and equipment used were not effective or efficient. Finally, it can be said that problems periodically occur in terms of the broadcast flow and quality of online courses in this context, which includes increasing the quality of online course service with a 1% frequency in the table. The teachers' opinions on the problems they observed as a result of the teaching given are shown in Table 8.

When Table 8 is examined, it can be seen that the "feedback-correction, evaluation, and supervision" category had the highest frequency (20%), and some of the teachers' opinions regarding this situation are as follows:

- Teacher 4 (female, master's degree, 6–10 years) "There were students who gave up watching online education because they did not have the basic concepts of education such as feedback correction and reinforcement, which were not effective on children who had difficulty in understanding. The greatest factor that caused them to give up was the lack of teacher control and supervision."

- Teacher 32 (female, bachelor's degree, 11–20 years) "I think there is a problem in terms of whether the students reach their goals, i.e., the control step because, as their teachers, we have no idea whether the child understood, could follow the lesson, what points he/she did not understand, and so on."

Table 8   Teachers' opinions on the problems they observed as a result of the teaching given

		Frequency	Percentage (%)
Teachers' opinions on the problems they observed as a result of the teaching given	Lack of internet and related channel	16	16%
	The questions used are only published on the website, the published questions cannot be printed out, and these questions are not broadcast on the television	5	5%
	Not reaching all relevant students	10	10%
	Absence of feedback-correction, evaluation, and supervision	20	20%
	Families do not have enough information or interest in the subject	5	5%
	The teaching given is not interesting, motivating and effective	15	15%
	Asynchronous teaching is given and students are not communicating with their teachers	14	14%
	Not enough examples and repetitions	6	6%
	Not enough body language	1	1%
	Lack of tools	4	4%
	The lessons taught are not suitable for all levels	4	4%
	Weekly upload of courses to the website	1	1%
Total		100	100%

When the opinions are examined, it can be said that individuals with a bachelor's, master's or PhD degree had the same opinion regarding the lack of supervision and evaluation irrespective of gender.

The category of "Lack of internet and related channel has a 16% frequency, indicating that there is no possibility for students who cannot access the internet and the relevant channel to participate in distance education. Furthermore, the frequency percentage for the category of 'the teaching given is not interesting, motivating and effective' is 15%. It is seen that teachers (14%), who stated an opinion in the category of 'asynchronous and students are not communicating with their teachers, mentioned the disadvantages that emerged as a result of the asynchronous education. 6% of the teachers stated their opinions in the category of 'not enough examples and repetitions', and 5% in the category of 'the questions used are only published on the website, the published questions cannot be printed out, and these questions are not broadcast on the television'. The fact that only 5% of responses were in in the category 'the questions used were only broadcast on the internet, and there are no television questions', reveals one of the major problems experienced in distance education.

As 5% of the teachers stated that "families do not have enough knowledge and interest on the subject", this suggests that some students had difficulty in understanding the subject because their families do not have enough interest and knowledge about the course content. When the table is examined, it is seen that while a 6% frequency was obtained for the categories of 'lack of tools' and 'the lessons taught are not suitable for all levels', only 1% stated opinions in the categories 'not using enough body language' and 'weekly upload of courses to the website'. The responses of the teachers regarding the

actions that can be taken to solve the problems that arise in the distance education process are shown in Table 7.

Table 9 Teachers' opinions about to the actions that can be taken to solve the problems that arise in the distance education process

		Frequency	Percentage (%)
Teachers' opinions about the actions that can be taken to solve the problems that arise in the distance education process	Informing teachers, families, and students about distance education	19	19%
	Providing internet and technological infrastructure equally to all students	16	16%
	Every teacher has synchronised, interactive training with their own classroom	29	29%
	Ensuring effective communication and cooperation between parents and teachers	7	7%
	Conducting R&D studies on the subject	16	16%
	Participation of all students in education	5	5%
	Daily upload of lessons to the website	1	1%
	Giving the lessons in a more interesting, exemplary, detailed, and repetitive way	6	6%
	Repeating the topics described in this process later in classrooms	1	1%
Total		100	100%

When the opinions of the teachers on the actions that can be taken to solve the problems that arise in the distance education process shown in Table 9 are examined, it is seen that the opinions regarding the category of 'every teacher has synchronised, interactive training with their own classroom' were ranked first. If the specified situation is realised, it is thought that distance education can be conducted in a more efficient manner. Some of the various teachers' opinions on the subject are as follows:

- Teacher 6 (female, bachelor's degree, 20 years and more) "I think it is more appropriate for every teacher to address their own class with their activities. After all, it is a fact that every class and even every school will make different progress. In this way, the teacher will be able to progress more accurately and effectively with their own students, as they know their students, and the students will provide feedback to his teacher with more discipline."

- Teacher 26 (female, bachelor's degree, 11–20 years) "I think that virtual active classes should be created by improving the technological competence and equipment of all teachers."

Irrespective of gender, when the professional experience is considered, it is seen that 29% of the teachers suggested that each teacher should performed one-to-one online education with their own class. It is seen that the second-highest frequency is 19% in the category of "Informing teachers, families, and students about distance education." Some of the teachers' opinions related to the subject are as follows:

- Teacher 1 (female, bachelor's degree, 6–10 years) "In order to solve these problems, the ministry should first be informed about distance education and then teachers should be given a compulsory course on the subject. Of course, parents should also be informed about this issue."

- Teacher 2 (male, master's degree, 11–20 years) "All teachers and parents should be informed about distance education."

While the category of "Providing internet and technological infrastructure equally to all students," indicated in Table 7, was repeated with a frequency of 16%, some teachers' opinions on the subject were as follows:

- Teacher 3 (female, bachelor's degree, 6–10 years) "Free internet can be provided to all children as other countries do."

- Teacher 34 (male, bachelor's degree, 6–10 years) "The state should provide every child with the necessary technological equipment. At least one technology lesson per week should be held in schools. Children should be enabled to use distance education and technology."

It can be said that conducting research and development studies in every field that is desired to be developed and acting in a specified way is the best solution method with the category of 'conducting R&D studies on the subject', in which a frequency of 16% was achieved.

- Teacher 12 (male, master's degree, 6–10 years) "Feedback should be obtained from teachers, students and parents and more efficient lessons can be created by doing R&D studies in this context."

Among the solution suggestions, it can be said that the opinions stated in the category of "Ensuring effective communication and cooperation between parents and teachers" with a frequency of 7% reveal the importance of the necessity of cooperation between parents and teachers when the education of students is considered. While 6% of participants expressed opinions in the category of 'gGiving the lessons in a more interesting, exemplary, detailed, and repetitive way', one of the teacher's opinions on the subject was reflected as follows:

- Teacher 33 (female, bachelor's degree, 6–10 years) "The broadcasted videos should be enriched and developed as animations in fun and more catchy way. So children enjoy watching the videos without becoming bored, and the information becomes memorable."

A total of 5% of the teachers expressed opinions in the category 'pParticipation of all students in education', and 1% in each category of 'dDaily upload of lessons to the website', and 'repeating the topics described in this process later in classrooms'.

4   Conclusions – discussion

When the data analysis results were examined, the teachers' opinions about distance education were gathered under seven main themes. These opinions are as follows: their opinions on the effects of video lecturing on the students during the distance education

process, their opinions on the introduction of online education on television, the teachers 'opinions on lecturing during the process, their opinions on what can be done to increase productivity, their opinions on the problems observed, and their opinions on the actions that can be taken to solve the problems that arise. Considering the opinions of the teachers about distance education, which is the first theme, it was seen that 50% of the teachers found the distance education applied in our country during the COVID-19 pandemic process to be sufficient. Similarly, the results obtained by Pınar and Akgül, (2020) in their studies examining student views on distance education applied in Turkey seem to coincide with these research results. In the relevant study, they stated that students found distance education to be beneficial despite the negative effects of the pandemic in general, and reinforced the subjects with repetitions, especially not to be excluded from education. In today's conditions where distance education is implemented by uploading videos to the relevant platform and watching repetitions, it can be assumed that education through live classes has elevated the distance education that is currently applied to the next level.

An examination of the teachers' opinions regarding the impact of video lectures published as part of the distance education process, 36% of the teachers involved in the study expressed that video lectures had a positive and beneficial effect on the students. Similarly, according to the findings obtained in Tekin's (2020) study on in-service training programs using distance education, teachers who had both positive and negative feelings stated that video lecturing is beneficial as students have the opportunity to re-watch them. Considering that teachers had no previous experience in front of the camera, their devoted work in this process should not be ignored. When the opinions of teachers about the third theme of the study were examined, namely the introduction of online education on television, with a 66% frequency, teachers supported this practice to provide equal opportunities in education, arguing that this method applied to reach more students was a positive and necessary step. While this situation made education accessible to students who do not have access to the Internet or a computer at home, as it was broadcast on a single channel, this led to problems finding the relevant channel and reflected the fact that the provision of equal opportunities could not be fully achieved. This result is consistent with the results of the research in which Burgess and Sievertsen (2020) described the effects of COVID-19 on education and teaching and that the global closure of educational institutions could lead to unequal disruptions in teaching students. It was ensured that students who have been prevented from attending formal education all over the world continue their education with the distance education practices determined by each country. However, it is stated that some students do not have the same opportunities in education due to insufficient technological resources, and when OECD data are examined, it is seen that 95% of students studying in Switzerland, Norway, and Austria have computers, while in Indonesia have access to such technology.

In this process, in the fifth theme, what actions can be taken to increase productivity during distance education, it was observed that 33% of teachers stated that if lessons were conducted live, online, synchronously, and interactively, this would create a more efficient process. It is thought that the result obtained in this theme is related to the result obtained in the seventh theme of the research and they correspond exactly to each other. In addition, as Ustaoğlu (2020) stated, creating discussions in the learning environment by providing instant feedback to increase students' interaction and learning in education. Considering the teachers' opinions in the sixth theme related to the problems observed by the teachers during the pandemic process, 20% of the teachers referred to the absence of

feedback-correction and evaluation. Feedback-correction, evaluation, and supervision, which are the fundamental steps of education, not only have importance in terms of increasing the quality of education, but also motivating the students. In this context, as Sönmez (1987) stated in his study on increasing the quality of education, it was found that the use of applications such as feedback-correction and reinforcement in combination provided success in education and achieved the desired efficiency faster. In line with the current research findings, Çakın and Akyavuz (2020) also stated that the inability to provide students with feedback decreases the control in the education process, students who cannot be reached experience communication disruption, and students experience problems due to the lack of internet access.

When the teachers' opinions on to the actions that can be taken to solve the problems that may arise in distance education, which is the last and seventh theme of the study, were examined, it was determined that 29% of the teachers stated that each teacher could conduct lessons that could be performed online synchronously or interactively in their own classroom. Similar to the current research findings, it is noted that Osmanoğlu (2020) argued that teacher presentations should be prepared to make the lesson more engaging with entertaining stories and puzzles, questions should be included during the presentations, and an environment in which children can participate in the lessons with interactive methods should be developed. When Reimers and Schleicher (2020) data were examined, it was found that problems experienced by students were not only due to the lack of technological resources, but also the quality of education they received due to their ability to use the distance education platform in this process. In this period when the education, training, and supervision system were forced to change due to the health problems experienced, the transfer of the same methods and techniques to each individual while not taking into account the individual differences in education harmed the students in many ways, causing them to move away from the school and find what was done was meaningless. The practices that show that education can not only performed within the walls of the school but in any location also reveal that education can be continued online in the future. In parallel with this result, Foti (2020) found that while examining the problems experienced in primary school, the solutions for these problems, and the limitations experienced in his research, he revealed that the teaching given via the e-classroom approach were efficient and teachers provided education that was beneficial. As a result, it has been revealed that there are a number of issues that need to be considered in order to make the lessons provided more effective and efficient during the pandemic. In this context, this study shows the level of preparedness of the MoNE, educational institutions, education system, teachers, parents and student, in online education, which has been developed with the use of existing resources in a short time, considering the equality of opportunity in education of each student, and has been implemented despite the deficiencies in the infrastructure. The following suggestions can be made:

5   Suggestions

- When the findings of this study are carefully examined, it can be concluded that the country's internet infrastructure should be developed to ensure equal opportunities in education, and teachers in primary education should be encouraged to give lectures through online real-time interview platforms, as is the case in higher education.

- Teachers should determine whether students in their classrooms have the necessary technological infrastructure such as the internet and computers, and these needs should be met by the state.

- Each teacher should be maintain contact with their class and involve all their students in distance education. Every classroom teacher should apply the feedback-correction, evaluation, and supervision steps of education in their class.

- Supervisors or principals of each school should encourage teachers to apply the necessary communication and supervision by asking teachers for daily follow-up information and ensuring continuity.

- In the distance education process, both families and teachers should cooperate and communicate effectively; this process should be carried out with the family.

- If distance education continues by broadcasting on television, it should be ensured that every student can access the relevant channel.

- More productive lessons should be designed by obtaining feedback from teachers, students, and parents and by conducting R&D studies in this context and analysing the distance education implemented in other countries around the world.

- Courses and training programs that will enable teachers to develop they knowledge of distance education should be organised.

- In order for students to develop in this regard, computer lessons must be offered in schools or online.

- Families should become more aware of distance education.

- Broadcasted videos should be enriched and developed into animations in a fun and catchy way. Thus, while enabling children to watch videos that they can enjoy without getting bored, the long-term retention of information can also be achieved. In addition, shortening the duration of the videos can also have a positive effect on increasing the attention span of children.

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