# Journal of Educational Technology & Online Learning

Volume 6 | Issue 1 | 2023 http://dergipark.org.tr/jetol



# The views of teachers on distance education during Covid-19 process

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Suggested citation: Kılınç, H. H. & Medeni, F. (2023). The views of teachers on distance education during Covid-19 process. *Journal of Educational Technology & Online Learning*, 6(1), 221-233.

#### Highlights

### Due to the pandemic, schools have also been affected by the restrictions experienced in all sectors and all over the world, and there has been a compulsory shift to distance education.

- Advantages of distance education as communication, flexibility in place and space, flexibility in time, high number of participants, economy, recoding and re-watching, technology integration to education, sustainability in education, easy information flow, and eliminating geographical differences.
- Disadvantages of distance education as technological reasons (infrastructure, technological dependence, ineffective use of technology), difficulty in supervision and control, socio-economic differences, difficulty in receiving feedback, disadvantaged groups' inability to benefit, and communication.

**Article Info:** Research Article

**Keywords:** Distance education, Distance education effectiveness, Teachers' views

Abstract

The aim of this study is to reveal the views of teachers on distance education, which is carried out using various platforms due to the pandemic in Turkey. The case study design, one of the qualitative research methods, was used in the research. Convenience sampling method was used in the selection of the participants. The participants were selected on the criteria that they conducted live lessons through distance education platforms and worked at a public school during the pandemic. The data of the study were collected through an interview form prepared by the researchers. The data collection instrument consists of two parts. The first part consisted of questions related to demographic information of the participants. The second part of the form included questions to determine teachers' views on distance education. The data of the study were analyzed with a computerassisted qualitative data analysis program. The participants stated that distance education has the advantages in terms of communication, flexibility in time and place, high number of participants, and economy. On the other hand, they stated that distance education has limitations in terms of technological reasons, limited active learning, socio-economic reasons, receiving instant feedback, supervision and control, and disadvantaged groups' inability to benefit. Although it was concluded that the participants considered themselves sufficient to manage the distance education process effectively, it was determined that the teachers did not receive any in-service training in order to plan, implement and evaluate the distance education processes. In this context, the participants stated that they want to receive in-service training on the use of Web 2.0 tools, live lesson management, distance education planning training, infrastructure training, presentation techniques. The participants offered suggestions to teachers, students, parents, and other stakeholders about the solutions of the problems they experienced.

#### 1. Introduction

Education which started with the existence of human beings and continued until the death of an individual, is one of the most fundamental factors determining the present and future of the societies. According to the dictionary of the Turkish Language Association (TDK), education is defined as "helping children and young people acquire the necessary knowledge, skills and understanding, develop their

Doi: http://doi.org/10.31681/jetol.1148197

Received 25 Jul 2022; Revised 15 Dec 2022; Accepted 16 Dec 2022 ISSN: 2618-6586. This is an open Access article under the CC BY license.



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personalities, directly or indirectly, inside or outside the school, in order to take their place in community life." (TDK, 2021). Technological innovations and inventions in education lead to the emergence of new concepts (Çengel, 2014). Among these concepts, distance education comes to the fore. Distance education has become a phenomenon that has experienced significant changes in the teaching and learning process in the last decade (Simonson, 2012 Hongmei-Li, 2002). The uncertainty of the size, duration and impact of the coronavirus (Covid-19), which affected the world, caused schools to be suspended and accelerated distance education activities in Turkey. In order to ensure the continuity of education and training, EBA and TRT OKUL platforms were put into practice in a short time.

Various researchers (Keegan, 1990; Schrum, 2000; Willis, 1994) have defined distance education in different ways. Distance education is "institution-based, formal education in which the learning group is separated and interactive communication systems are used by bringing together learners, resources and trainers." (Schlosser and Simonson 2009, p. 1). According to Menchaca & Bekele (2008), distance education is an activity that is carried out in situations where learners and teachers are far from each other, using the means of mail, television, telephone, letter, and the Internet via video conferencing.

Along with the developing technology, there have been changes and developments in the distance education system. Moore and Kearsly (2005) divide the historical development process of distance education into five periods: "learning by letter, radio and television broadcasts, open education institutions, teleconference, internet and web". The concept of distance education, which started with learning by letter in Turkey, has reached the modern distance education line with the widespread use of television and radio broadcasts by the Turkish Radio and Television Corporation (TRT) and the use of digital systems and the internet in education today (Elitas, 2017). Distance Learning has objectives such as creating new educational opportunities, providing equal opportunities in education, providing lifelong learning, integrating educational technologies into the process, providing both individual and mass education opportunities, and making education effective, efficient and cost-effective (Alkan, 1998; Cavanaugh, 2001). ). Especially when compared to face-to-face education, the important advantages of distance education stand out. Distance education provides access to information to large audiences without time and place limitations. By adding richness and flexibility to educational processes, it allows learners to learn continuously and independently at their own learning pace. Distance education enables instant and easier access to information with information and communication technologies, reduces training costs, and offers a flexible and objective assessment and evaluation (Elitaş, 2017; İşman, 2008, Uşun, 2006).

When the literature is examined, it has been stated that the distance learning has both positive and negative aspects. Having the capacity to teach students/teachers "anywhere" and "anytime" (Hongmei-Li, 2002), lack of geographical restrictions (Murphy, Rodríguez, Manzanares, & Barbour, 2011), ease and flexibility (in terms of learning speed) (Valenta, Therriault D., Dieter M., Mrtek R.-2001), low cost for the institutions (Bakioğlu & Can, 2014) are its positive aspects. Although distance education has been shown to be an effective way to teach students, there are also barriers to the use of distance education (Hannum, Banks, & Farmer, 2009). These barriers were identified by Muilenburg and Berge (2005) as administrative issues, social interaction, academic and technical skills, motivation, time and support, cost, and internet access. In addition, organizational resistance to change and lack of infrastructure (Muilenburg & Berge, 2000), rural schools and the geographical structure of these schools (Johnson & Strange, 2007) are stated as barriers to the distance education process.

Various studies have been conducted on the effectiveness of distance education. When the literature is examined, it has been seen that many studies have been carried out at national and international level related to distance education (Elçiçek, 2021). However, the studies conducted on the effectiveness of distance education, which started with the pandemic process in Turkey and included in the formal education scope of the Ministry of National Education with the TV broadcast and EBA platform are limited. In today's world where technological developments and changes are experienced very rapidly,

studies on the effectiveness of distance education in formal education are important in terms of increasing the quality of educational activities. Effective implementation of distance education, which has become even more important after the pandemic process, varies depending on the performance of teachers. With the pandemic process, the fact that distance education programs can meet the educational needs of individuals and are on the agenda reveals the importance of our work. In this respect, this study states importance to determine teachers' perspectives on distance education and to develop suggestions in line with the findings and to carry out the distance education process effectively and efficiently. The aim of this study was carried out to evaluate the process from the eyes of teachers who organize educational activities within the distance education process and unite students in virtual classrooms. For this purpose, the answers of the following questions have been sought.

- What are the views of the teachers who participated in distance education practices about this practice?
- What are the views of teachers about the effectiveness of distance education?
- What are the views of the teachers about the in-service training activities they want to take on distance education?
- What are the suggestions of teachers about the problems they experienced during distance education?

# 2. Methodology

#### 2.1. Research Model

This research is a qualitative study to examine the views of teachers about distance education carried out using various platforms due to the coronavirus that has affected the world. Qualitative research is a type of research in which data is presented in a realistic and holistic way by using observation, document analysis, interviews, document analysis and similar methods (Yıldırım & Şimşek, 2008). Qualitative research does not only aim to obtain numerical data and seek an answer (Braun & Clarke, 2013). It is recommended that the qualitative research method be preferred in studies aiming to reveal the thoughts of people (Zerey, 2019). Since it is aimed to reach purpose-oriented data, a case study, one of the qualitative research methods, was used in the study. In the case study, there is a detailed, regular and in-depth analysis of current phenomena and events in their natural environment (Patton, 2002).

#### 2.2. Data Collecting Tools

One of the most frequently used tools to collect data in qualitative studies is the interview. Interview is defined as expressing the feelings and thoughts of the participants on a determined subject (Karataş, 2015). A semi-structured interview form prepared for teachers was used in the data collection process of the study. An academician and two teachers were interviewed in the preparation process of the semi-structured interview form. In the interviews conducted with field experts, information was obtained about the applications and topics related to distance education. The first version of the developed form included six questions. As a result of expert opinions and afterwards, the literature was examined and five openended questions were prepared in the form of a semi-structured interview form. Data were collected during the distance education process.

There are various criteria for the validity and reliability of the semi-structured interview form used in the research. One of them is participant confirmation. At this point, the selection of teachers was based on voluntariness and it was stated that their names would be kept confidential and would not be disclosed in any way in order to ensure that they answered the questions sincerely. The second criteria is the collection of data by face to face in-depth interviews with the participants. For this purpose, face-to-face interviews were conducted with the researchers and the data were collected in this way. Confirmation of the

interview form by submitting it to expert opinion is also an important criteria that ensures the reliability of the research. In this context, expert opinion was sought on the subject. Another criteria that ensures reliability is the opinions of the participants are shown directly in the findings section. For this reason, the opinions of the teachers were conveyed exactly as they were.

## 2.3. Sampling or Study Group

Teachers teaching through distance education platforms participated in the study in the second half of the 2019-2020 academic year. In the selection of the participants of the study, the convenient sampling method, which is based on the criteria of being fast, useful and easy to access, was used (Patton, 2002). 32 teachers participated in the current study. Nineteen (59.4%) of the teachers were male and thirteen of them (40.6%) were female. Participants were the teachers of Primary school, Geography, Special Education, Preschool, English language, Psychological Counseling and Guidance, Biology, Religious Culture and Moral Knowledge, and Turkish Language Teaching. Twenty-nine (90.6%) of the participants of the study had bachelor degree and three of them (9.4%) had Master of Art Degree. The professional experience of the participants ranged from 1-31 years. Participants were paired with the letter "P" and coded as P1, P2, P3, ....

#### 2.4. Data Analysis

The data were analyzed with the NVivo 10 program. NVivo is a useful tool in qualitative data analysis. Using NVivo, the progress of an idea can be monitored quickly and effectively from the first to the last stage (Walsh, 2003). The answers given to each question were analyzed with NVivo and thematic groupings were made.

#### 3. Findings

The questions: "What do you think about the Distance Education process? What are the advantages and disadvantages of distance education? Were asked to the participants and the analysis of the answers given by the participants regarding the advantages of distance education is presented as follows:

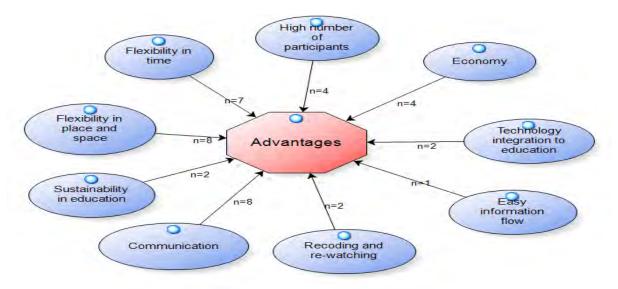


Fig. 1. Advantages of distance education

When Figure 1 is examined, teachers stated that distance education provides advantages in terms of communication, flexibility in place and space, flexibility in time, high number of participants, economy, recoding and re-watching, technology integration to education, sustainability in education, easy

information flow, and eliminating geographical differences. The view of the participants regarding this question are presented below.

"It prevents the students from completely becoming distant from the process." (P-1)

"While it has advantages such as saving time and appealing to a wider audience, it is the biggest advantage of the students not to break away from the education environment and learning habits in extraordinary situations (such as pandemics). (P-5)

"Less costly and technological elements can be used simultaneously." (P-9)

"independent of time and place, the number of students to attend is high, it can be watched again, the cost is low are among the advantages of distance education." (P-19)

The analysis of the answers given by the participants regarding the disadvantages of distance education is presented below.

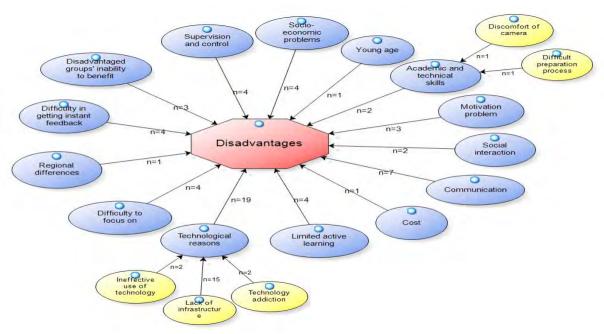


Fig. 2. Disadvantages of distance education

When Figure 2 is examined, teachers mostly stated "technological reasons" as the disadvantage of distance education. "Not using technology effectively, lack of infrastructure, encouraging technology addiction" were stated to be technological disadvantages of distance education. The participants expressed the "communication" element as both an advantage and a disadvantage. The reason why the participants stated it as a disadvantage can be explained that although distance education provides the opportunity to communicate with people, it does not provide an effective communication as face-to-face communication does. In addition, the participants stated that distance education has limitations such as "limiting active learning, socio-economic problems, difficulty in getting instant feedback, supervision and control, social interaction, motivation problem, cost, disadvantaged groups' inability to benefit ". The opinions of the participants regarding this question are given below.

"The disadvantages of distance education are that it is carried out on a single system, problems originating from the internet (connections and disconnections), communication is one-way, does not appeal to disadvantaged groups, and families do not have internet access due to socioeconomic conditions" (P-4)

"The internet infrastructure is not sufficient and the planning of the process is not done well. These reasons interrupt the education. It is not possible for education to be carried out among the families who do not have sufficient technological equipment and have difficulty in accessing technology. In addition, distance education has a disadvantage for young students and students who need special education, as their attention span and their control are difficult. I think the education of children who need special education, who show problem behaviors, and who have difficulties in receptive/expressive language skills are not possible with distance education. (P-5)

"It is more difficult for students to focus on the lesson in the distance education. It is not under the control of the teacher. It takes a lot of time to get feedback while the subject is being explained. Not all students have internet access or they have connection problems." (P-15)

"After a certain period of time, the students experience attention loss in front of the computer and the students cannot be directly controlled during distance education." (P-21)

"Education in Schools is not just learning or teaching a certain subject. Socialization and personality development are also important" (P-26)

The question; "What do you think about the effectiveness of the courses in the distance education process?" were asked to the participants as the second question of the study and the analysis of their answers is presented below.

**Table 1.**The effectiveness of the courses during distance education

	Successful (n)	Partially Successful	Unsuccessful
Academic effectiveness	6	9	10
Effectiveness in disadvantaged groups	0	5	19

The effectiveness of the courses in the distance education process was discussed in two dimensions by the participants. These are Academic Effectiveness and Effectiveness in Disadvantaged Groups. In the "Academic Effectiveness" dimension, the participants stated that they found the effectiveness of the courses as mostly unsuccessful and partially successful. In the sub-dimension of "Effectiveness in Disadvantaged Groups", the majority of the participants stated that they were unsuccessful in the effectiveness of the courses. The opinions of the participants about these dimensions are given below.

I think that distance education is not effective especially for the students who need special education or the students whose academic success is low as their short attention span and their inability to focus. (P-4)

""It is not very effective, because the students are not in the classroom environment and there are too many distractors at home. (P-8)"

"While it was effective at first, the effectiveness decreases as the process takes longer. (P-19)"

"As a teacher, we do not only care about the effectiveness of their academic success. It is very important for children to communicate with their teachers, share their feelings, and communicate with their friends. (P-20)"

"I especially think that the live lessons are beneficial. (P-26)"

"I think it's ineffective. Because in face-to-face education, we can give immediate feedback. It is easier for some students to make excuses and to break down the lesson in distance education. (P-29)"

"Have you received any in-service training before to plan, implement and evaluate the distance education process?" was asked to the participants and the analysis of the answers they gave is presented below.

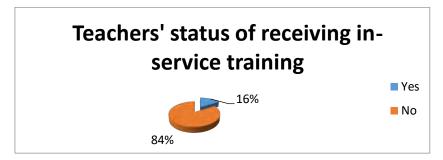


Fig. 3. Teachers' status of receiving in-service training

Regarding this question, 84% of the participants answered "No" (that they did not receive any in-service training) and 16% "Yes" (that they received in-service training). In addition, the participants were asked, "What kind of in-service training would you like to receive during the distance education process?" The analysis of the answers given to this question is presented as follows:

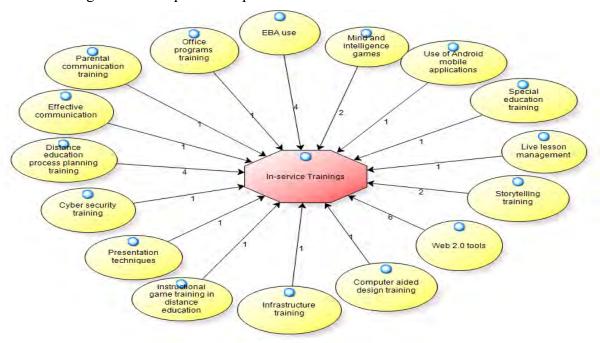


Fig. 4. Need for in-service Trainings

When Figure 4 is examined, it is determined that the participants mostly want to receive training on the use of Web 2.0 tools during the time they spend at home due to the distance education process. In addition, in order to manage the distance education process effectively and healthily, the participants stated that they want to receive trainings on the subjects such as "live lesson management, distance education process planning training, EBA use, storytelling, mind and intelligence games, infrastructure training, presentation techniques, Office programs training, special education training, use of mobile applications, parental communication training, computer aided design training, educational game training in distance education, effective communication, cyber security training". The views of the participants regarding this question are given below.

"I would like to receive in-service trainings of lesson planning for distance education, use of web 2.0 tools, and storytelling." (P-4)

"I would like to increase my technological competence and receive in-service training on effective distance education planning." (P-5)

"I would like to know how to solve technical problems." (P-12)

"Instructional materials that we use in distance education and web-based programs can be introduced to us." (P-19)

"I would particularly like to know math-based software such as geocebra" (P-30)

"What are your suggestions for solutions to the problems you encounter during the Distance Education process?" was asked as a final question to the participants and the analysis of the answers they gave is presented below.

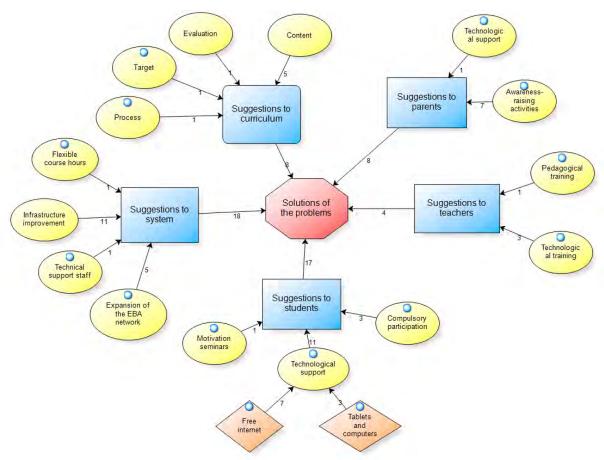


Fig. 5. The suggestions to the problems experienced during distance education

As seen in Figure 5, the participants offered solutions to the problems they experienced for teachers, students, parents, the system and the curriculum. The participants emphasized that the teachers should be provided with in-service training on pedagogical education and technology use. They stated that technological support, compulsory participation, technology use and motivation seminars should be given to the students, and that technological support and awareness-raising activities should be carried out for parents. They offered solutions such as the need to update the curriculum in terms of target, content, process and evaluation. Regarding the problems experienced in the system, the participants offered solutions such as infrastructure works, technical support, expansion of the EBA network and flexible course hours. The opinions of the participants are presented below:

"First of all, students' lack of technical information and using communication technologies should be compensated." (P-7)

"Supportive trainings should be provided to improve the teachers to a certain level in terms of technical and pedagogical knowledge." (P-11)

"The content of EBA should be enriched." (P-19)

"The internet network provided by the government should be improved and the students should be given tablets and computers." (P-23)

"Infrastracture investments should be increased. Distance education course should be implemented in the curriculum for formal education." (P-5)

"A special section can be added to EBA and course content similar to İYEP (Education Program in Primary School) can be created and learning outcomes can be achieved for the level of students who have low academic success" (P-9)

"The state can provide with free local Wi-fi services that enable students to log in only to EBA platform. The students who have problems to access EBA platforms should have service from their neighbourhood public buildings such as schools, district governorship, public education centers." (P-17)

"The course duration should be decreased and their break time should be increased on the grounds that their emotional and psychological needs should be met. And this is not possible with distance education." (P-11)

#### 4. Conclusion, Discussion, and Suggestion

The current study aimed to examine the views of teachers who used distance education platforms on the effectiveness of the distance education process, which has become one of the most important changes in our social life with the effect of Covid-19 epidemic. Due to the pandemic, schools have also been affected by the restrictions experienced in all sectors and all over the world, and there has been a compulsory shift to distance education. Although the participants stated that distance education was a requisite to sustain education through the platforms created by the Ministry of National Education (EBA and TRT OKUL) during the pandemic, they emphasized that distance education could not replace face to face formal education. The studies conducted by Özen and Baran (2019) and Maushak and Ellis (2003) concluded that attitudes of teachers towards distance education were positive. On the other hand, the studies conducted by Düzakın and Yalçınkaya (2008) and Taşçı (2021) revealed that distance education cannot replace face-to-face education. The current study showed that especially disadvantaged groups (visually impaired, physically disabled, autistic, etc.) and students with low academic success have very limited opportunities to benefit from distance education. Therefore, the participants of the current study do not find distance education effective for these students. It has been determined in a study (Souleles et al., 2021) that the application of distance education requires a complex and multifaceted process even in normal periods of time. Therefore, it is inevitable to experience problems with a sudden shift to distance education because of the pandemic.

The teachers stressed the advantages of distance education as communication, flexibility in place and space, flexibility in time, high number of participants, economy, recoding and re-watching, technology integration to education, sustainability in education, easy information flow, and eliminating geographical differences. Özdoğan and Berkant (2020) also revealed similar findings in their study. The participants of the current study listed the disadvantages of distance education as technological reasons (infrastructure, technological dependence, ineffective use of technology), difficulty in supervision and control, socioeconomic differences, difficulty in receiving feedback, disadvantaged groups' inability to benefit, and communication. However, *communication* was stated as both an advantage and a disadvantage by the participants in the distance education process. *Communication* is seen as an advantage because it fosters teacher-student interaction, sustain the educational activities, and provides psychological support in extraordinary situations (earthquake, pandemic, etc.). On the other hand, *communication* is stated to be a disadvantage because of some reasons such as the presence of students who cannot be reached due to the

socio-economic status of the families (Tunaz & Önem, 2017), the constant interruption of communication due to infrastructure problems, difficulty in communicating with disadvantaged groups, and low student-student interaction.

The majority of the participants in the study stated that they did not receive any in-service training to plan, implement and evaluate the distance education process. In some studies similar to our research result, it has been determined that teachers need in-service training on distance education, (Kırmizigul, 2020; Balaman & Hanbay Tiryaki, 2021; Yenen & Yöntem, 2020). Today, when technology is at the center of our lives, it is impossible to educate our children, who start their education life surrounded by technology, with traditional methods and techniques (Elmas & Geban, 2012). The participants, who are aware of this situation, want to participate in in-service training programs that will enable the effective use of technology in the educational environment during the distance education process. In order to effectively manage the distance education process, the participants stated that they want to receive inservice trainings such as "the use of Web 2 tools, live lesson management, distance education process planning training, EBA use, storytelling, mind and intelligence games, infrastructure training, presentation techniques, Office programs training, special education training, use of mobile applications, parental communication training, computer aided design training, educational game training in distance education, effective communication, cyber security training".

In the studies on the use of Web 2.0 tools in educational environments (Elmas & Geban, 2012; Mete & Batıbay, 2019; Almalı & Yeşiltaş, 2020), the integration of these tools in the education process was found to increase the participation of students with more sense organs (Prensky, 2009), to arouse students' interest in the lessons, to be more effective in the process of structuring information compared to traditional methods, to provide technology literacy (Özmen et al., 2011). The students become not only learners but also individuals who produce, share and research in the education process with Web 2.0 tools (Karalar & Özdemir, 2013). As a result of the rapid developments in this field, Web 2.0 tools are being replaced by Web 3.0 tools (Kekeç & Erdönmez, 2015). The proficiency of using technologies, students' access to information tools, and in-service training of teachers are among the most important factors in the success of the distance education process (König, Jäger-Biela, & Glutsch, 2020). The Ministry of National Education is expected to increase and diversify in-service training activities that will contribute to the professional development of teachers.

Finally, the teachers offered solutions to the problems they experienced for teachers, students, parents, the system and the curriculum. They stated that in-service trainings should be given to teachers on pedagogical education and the use of technology. They emphasized that technological support, compulsory participation, use of technology and motivation seminars should be given to students. They expressed that technological support and awareness-raising activities should be carried out for parents. They offered solutions such as infrastructure improvement, technical support and flexible lesson hours for the problems experienced in the system and that the training programs should be updated in terms of target, content, process and evaluation. UNESCO (2020) proposes different platforms and resources in order to facilitate the learning of parents, teachers, school administrators and students during the epidemic and to provide psycho-social support during the periods when schools are closed. These include resources to provide psycho-social support, digital learning management systems, systems designed for mobile phones, powerful offline systems, open online course platforms, independent learning content, mobile learning applications, collaboration platforms that support live video communication, digital learning content creation tools for teachers, and providing resources for the solutions of distance education problems.

As a result, the technological infrastructure, the sufficient equipment of the learners, the professional development of the instructors about distance education, the enrichment of the content and the transformation of the materials into a digital learning platform determine the effectiveness of distance education. Schools should be enriched with technological opportunities to mediate distance learning. In

addition, in this process, digital content should be prepared for disadvantaged students and delivered to each student. Since it is not known how long the pandemic will last and there is a possibility that such situations may occur again in the future, there is a need to conduct further studies and take the necessary precautions.

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