Distance Education During the COVID-19 Pandemic in Turkey: Identifying the Needs of Early Childhood Educators

Ümran Alan¹

Accepted: 13 April 2021 / Published online: 20 April 2021
© The Author(s), under exclusive licence to Springer Nature B.V. 2021

Abstract

This study aims to identify the needs of early childhood educators regarding distance education during the COVID-19 pandemic. This basic qualitative research was carried out with a study group of 24 early childhood educators, all of whom were determined via a maximum variation sampling method. The study data were gathered via interviews conducted with the participants and analyzed through an inductive approach. The study findings showed that early childhood educators need to improve their technological competencies, have more interactive resources at their disposal, be able to take advantage of a user-friendly educational platform specifically designed for the early childhood period, be provided with the resources to serve families, and have support for their psychological well-being. Considering the essential role of teachers, which the COVID-19 pandemic has called to mind, it is of vital importance to meet the abovementioned needs so as to improve the quality of distance education in early childhood.

Keywords Early childhood educators · COVID-19 · Distance education

Introduction

On January 30, 2020, the World Health Organization first announced that COVID-19 was an emergency in international public health (WHO, 2020a). The disease was pronounced a pandemic on March 11, 2020, the day the first case appeared in Turkey (WHO, 2020b). Since these dates, it has been all countries' priority to not only control the spread of the disease but also to create pandemic-resilient societies by means of various precautions, measures, and regulations. Besides the economy and health care, education is considered the third fundamental component of a pandemic-resilient society (Fay et al., 2020).

A number of international institutions and educational experts affirm that the learning process should continue somehow during times of crisis when students cannot go to school physically (Dayal & Tiko, 2020). In line with this view, although the pandemic led to sudden school lockdowns, and face-to-face education was suspended in many

countries around the world, different modes of distance education were implemented after some time.

Because distance education has proved to be the dominant or only means of education all over the world, it has become more and more common even though remote learning is unusual at the K–12 level, especially in early childhood education (ECE). In Turkey, the first step toward distance education in ECE was taken on March 30, 2020, when the Turkish Ministry of National Education (MoNE) decided to switch to both the (Eğitim Bilişim Ağı, 2020) Education Informatics Network (EIN), which is a social educational platform founded by MoNE, and TRT-EIN TV, a TV channel founded as a collaboration between EIN and the Turkish Radio and Television Corporation. Although TRT-EIN TV did not broadcast any content in preschool or kindergarten education when the decision was first made, EIN later became available at certain times for preschoolers and kindergartners who could access the content uploaded by their teachers to the system. At first, distance education did not include any implementation that let children meet with their teachers and classmates simultaneously, such as online class time or a meeting hour. The 2019–2020 academic year was completed exclusively by means of e-content provided on EIN for preschoolers and kindergartners.

✉ Ümran Alan
ualan@anadolu.edu.tr

¹ Department of Early Childhood Education, College of Education, Anadolu University, 26470 Eskişehir, Turkey

The changes in the progress of the pandemic around the world and in Turkey have also led to changes in education in the 2020–2021 academic year. Different modes of learning, such as face-to-face, distance, and hybrid, have been used in the educational process. At the beginning of the 2020–2021 academic year, preschool and kindergarten children returned to traditional in-classroom learning on 21 September, 2020, in line with MoNE's plan for a controlled and gradual move back to face-to-face education. Within the scope of the orientation programme, during the first week, September 21–25, 2020, preschools and kindergartens were open for face-to-face education for 1 day only, and this day was planned as five activities, each of which lasted for 30 min. During the second week, from September 28 to October 9, 2020, preschools and kindergartens continued face-to-face for 2 days with five activities of 30 min for each day (MoNE, 2020a). Then the educational process was re-evaluated in line with MoNE's plan to gradually move away from distance education, and it was decided to allow face-to-face education on 5 days a week, with a school day planned as six activities of 30 min each, starting on October 12, 2020 (MoNE, 2020b). This ruling was to remain valid until November 30, 2020. However, to protect students, teachers, and other educational workers in light of the rise in COVID-19 cases around the world, MoNE decided to continue all educational activities remotely and to expand the content and scope of the educational implementations (MoNE, 2020c; 2020d). As regards preschool and kindergarten education, in the 2020–2021 academic year, distance education was approached more precisely compared to the first time around, and teachers were informed about the following:

- Getting in touch with families,
- Creating a daily educational plan with six activities, each of which should last for 20 min, and sharing this plan with school management and families,
- Guiding families to do the activities,
- Getting in touch and conducting activities with children in groups at least three times a week through EIN or any other secure platform approved by the school's management,
- Communicating via alternative methods with children who cannot participate in group meetings,
- Ensuring that preschoolers and kindergartners follow the educational activity programme for them on TRT-EIN Primary School TV (TRT-EIN Preschool), which started broadcasting on October 12, 2020,
- Encouraging families to take advantage of the Early Childhood Educational Calendar, prepared by MoNE's Directorate General for Primary Education, and other resources.

Although the requirement to switch to distance education in ECE was unexpected, the fundamental goal of ECE—providing children with developmentally appropriate and high-quality practices to support their development and learning, contributing to their well-being, and helping them realize their full potential—remains the priority in distance education. As in face-to-face education, achieving this goal requires the common effort of all stakeholders in ECE. According to Murray (2020), eligible early childhood educators (ECEs) have the potential to offer exceptional support to young children and their families during the pandemic and thus to strengthen the process of the post-COVID-19 global recovery.

However, as is the case in different countries around the world (Atiles et al., 2021; Dias et al., 2020; Kim, 2020), the effective application of educational practices for young children in distance education has not been emphasized in early childhood teacher training programmes, and so most ECEs currently in service in Turkey have not been educated in this way. Moreover, the complicated scenario created by the pandemic can even challenge teachers who are very well prepared, stable, and experienced (Darling-Hammond & Hyler, 2020). A recent study (Yıldırım, 2021) has shown that ECEs face many different challenges in the distance education process, which can originate in the environment or situation or with parents, students, or the teachers themselves. For these reasons, it is crucial to develop and implement action plans for early childhood in-service and pre-service educators so they are able to plan and implement high-quality and effective practices in distance education. The first step in developing and implementing this action plan is to identify ECEs' needs based on their experiences in distance ECE.

Methodology

This study, which aims to identify the needs of Turkish ECEs during the distance education period, has been designed qualitatively. The umbrella term of qualitative research consists of various other concepts and can be diversified in many different ways (Merriam, 2009; Patton, 2014). The current study has been designed as a basic qualitative research, which takes constructivism as its basis, is underpinned by phenomenology and symbolic interaction, and is one of the most frequently used research designs in the field of education. Basic qualitative research focuses on understanding how individuals make sense of their experiences, how they construct their inner world, and what kind of meanings they attribute to their experiences (Merriam, 2009). The goal of the current study was to identify the things that are interpreted as needs by ECEs on the basis of their experiences during the distance education period.

Participants

The study included 24 ECEs. Maximum variation sampling, which is a purposeful sampling technique, was used to determine the participants. A maximum variation sampling strategy entails intentionally selecting a wide range of cases to acquire a full variation on dimensions of particular interest and to capture and describe the core and central themes emerging from variation (Johnson & Christensen, 2014; Patton, 2014; Teddlie & Tashakkori, 2009). As Merriam (2009) noted, maximum variation in the sample allows for the possibility of a greater range of applications by consumers of the research. In light of this approach, the attempt was made to form a study group that was varied in terms of different qualities, such as type of school (preschool or kindergarten), current position (teacher or administrator), gender, and years of experience. Of the 24 participants, 4 were assistant principals and 20 were teachers. While all the ECEs occupying the position of assistant principal worked at preschools, 12 of the ECEs working as teachers were at preschools, 7 were at kindergartens within the body of a primary school, and 1 worked at a kindergarten within the body of a secondary school. Whereas the participant ECEs' years of experience varied between 1 and 23, the average number of years of experience is 10.4. Of the participants, 2 were male, and 22 were female.

The necessary permissions were received from Eskişehir Province Directorate of National Education, and the study was approved by the ethical committee of Anadolu University. Participants' consent to participate was obtained via phone calls. The participating ECEs were contacted and informed about the aim and content of the study. They were also informed about the data collection process, their rights as participants, and the measures taken to ensure their confidentiality, and the author highlighted that no personally identifying information would be used in the study so as to protect the participants' anonymity.

Data Sources and Collection

An interview protocol developed by the researcher was used as the data collection tool in this study. The interview protocol was developed based on informal conversations held by the researcher with in-service ECEs (who did not participate in this study) about distance education. The initial version of the interview protocol was presented to a kindergarten teacher with 15 years of experience and to two academics, of whom one was carrying out studies in the field of ECE and the other was conducting studies in the field of teacher training. The interview protocol was amended in line with the feedback received from these experts. Next, a pilot implementation was conducted with a preschool teacher, and the interview protocol was finalized.

Among the 24 participant ECEs, 18 were sent the interview protocol attached to an e-mail, and their views were received in this way. An individual semi-structured interview based on the protocol was held on an online platform with two of the ECEs. An online focus-group interview based on the protocol was conducted with four kindergarten teachers, all of whom were working at the same school but varied in terms of their years of experience.

Data Analysis

An inductive approach was taken to the data analysis with the goal of revealing explanations and results in line with the purpose of the study by looking for frequent, dominant, or apparent patterns in the qualitative data without the restrictions imposed by structured methods. The themes obtained by the end of the interaction with the study data constitute the study findings (Merriam, 2009; Patton, 2014). In this context, the data were prepared for the analysis, then a close-reading process was carried out to gain both familiarity with the content and information about possible codes and themes. Afterwards, codes were generated, which were re-analyzed to obtain themes and then clustered based on their meaning. A consistency check was performed for the analysis (Thomas, 2003). The generated themes and the data set were presented to an expert in the field of ECE who was asked to analyze the data in line with the themes, which were provided with examples. The expert analyzed the study data independently and then met with the researcher, and the two independent analyses were compared. A consistency with a ratio of 94% was found between the analyses. Lastly, the researcher and the expert reviewed and discussed the analysis together, consensus was obtained, and the analysis was finalized.

Findings

The study findings as to the needs of ECEs during distance education have been gathered under five themes. These themes can be listed as (1) need for improving technological competencies, (2) need for increasing the number of interactive resources, (3) need for a user-friendly platform on education at the early childhood level, (4) need for practices that provide families with services and support, and (5) need for ensuring psychological well-being. The study findings are presented with direct quotations from the interviews conducted with the ECEs.

Need for Improving Technological Competencies

One of the most significant challenges faced by ECEs during the distance education period is to make use of technology effectively for educational purposes. Almost all of

the participants stated that they need in-service trainings to improve their technological competencies. The participant educators noted that these trainings might be on various topics, for example, children and the appropriate use of technology, introduction of platforms that can be used for distance education, introduction and use of Web 2.0 tools, preparation of basic animations for children, introduction and design of digital games appropriate for children, introduction of interactive resources that would ensure children's participation, production of interactive content for children, creation and dubbing of e-books, or Internet safety. Below are relevant quotes from what the educators verbalized.

- As to the use of technological tools, I would like to know about programmes through which I can prepare worksheets for children. (Teacher 9)
- If I knew how to prepare animation or add voice to children's books in pdf format... That would be very helpful for me. For example, it would be very nice to prepare puzzles. (Teacher 6)
- I think that I need more theoretical and practical knowledge about technology. There is a need for in-service training on computers and the use of various computer programs. (Teacher 4)
- I think that it is certainly a must to receive training on skills for using technology, Web 2.0 tools, and cyber security for technology integration. (Teacher 12)
- Online activities can be planned. Teachers can be given training on online tools. (Teacher 10)
- I do not have online classes as an assistant principal, but if I had to, I would feel incompetent about using technological tools. (Assistant Principal 1)
- I have observed that there is a need to use technology, to upload and use various programmes. (Assistant Principal 3)

Need for Increasing the Number of Interactive Resources

The participant educators stated that the effectiveness of the resources provided by MoNE for children's use in the distance education period has been limited. Participants underlined their need for interactive books. Some of the teachers also indicated that they had reviewed resources offered by various publishing houses and found these resources more interactive and effective in distance education, and they felt that children and families might follow these activities more easily. Even the participant teachers who underlined that not all children have access to these resources emphasized that it is necessary to enrich the content of the educational resources that are provided by MoNE and available to all children, turning them into more interactive resources. Relevant quotes are as follows:

- It is necessary to develop interactive applications and electronic storybooks that teachers can use. The resource set consisting of three books presented by the Ministry should be expanded. For instance, five or six books should be made appropriate for interactive board use by adding QR codes or something like that. And they should be classified according to age. (Teacher 18)
- Resources and educational toys can be distributed. (Teacher 14)
- There must be resources. El Ele [the resource presented by MoNE for face-to-face education] is now insufficient for us. Its content should be expanded... (Teacher 15)
- During this period, I especially felt the need for educational mini animations, games with songs, audio and visual children's books, and videos suitable for concepts appropriate for preschool children in line with the topics. For example, I couldn't find animation appropriate for the preschool level that tells of miners for Miners' Day. (Teacher 6)

Need for a User-Friendly Platform for Early Childhood Education

Another study finding is the need for a platform in ECE that would provide educational activities and the opportunity to communicate. The participant educators emphasized that the nature of ECE is different from the other levels of education on EYN, and they stated that the content provided for this level should be separate from others and presented to families, children, and educators via a user-friendly platform. In their view, it is possible to provide more interactive and high-quality education by creating virtual classes on this platform that would ensure children's participation. Further, besides making interaction between teacher and children possible, this platform would make it easier for educators to interact and could also be used to communicate with families. Following are several quotes from the educators:

- A platform where teachers can see good practices. It can be integrated into other platforms, but it should be specific to early childhood education. A medium where they can share their own activities with each other. (Teacher 17)
- Unfortunately, access to resources is up to our, the teachers', effort. If we are formally informed about the resources, applications, and good practices that can be used for preschool education, we can undertake more effective practices. Moreover, the lack of a safe interactive platform that can be used for preschool education is a challenge for us. A separate platform can be developed for use by preschool teachers, students, and families. (Teacher 18)

Need for Practices that Serve and Support Families

Within the framework of this study, the participant ECEs reported that, besides dealing with major issues such as switching to distance education or adapting distance learning to ECE, they have also assumed the responsibility of providing information on the new roles of families. However, the participants expressed the need for in-service training in contacting families and training them during the distance education period. In addition, the educators recommended that major practices be started so as to both enable families to obtain information about their roles in distance education, for example, via various resources such as leaflets, booklets, or public service announcements, and raise awareness of the importance of ECE among families and society. The educators' views on the issue are given below:

- Although each and every student is joining online classes in this period, preschool children are the last to participate in online classes when they want to. Like “You are a preschool student, you don’t have to take online classes, but your older sister should not miss her classes, let’s give the tablet to her.” ... What is important here is to give this awareness to the parents as well. If the parents do not consider the activities we send important or have the children do them, there is nothing much we can do about it. For this reason, first of all, we shouldn’t lose contact with parents, and we should get rid of the wrong beliefs in their minds. If we show that preschool is important through what we do in this period, I am sure that everything will be better. (Teacher 7)
- We need to be in close contact with families, and we need their support very much. The technological needs of the families should be met. Without moving away from the goals of preschool education and without causing families to leave their houses, we need to direct families to activities they can do with their children and through which they can establish positive communication. We shouldn’t overburden families. We should know the socio-economic conditions of the parents and take steps accordingly. (Teacher 13)
- The variety and amount of printed materials should be increased and informative practices designed for parents regarding the effectiveness of distance education, countrywide practices to eliminate the notion that preschool education is less important than other levels of education; Internet quotas [should be] allocated specifically for the preschool level—the most frequent answer we get is “Madame/Sir, the elder sibling has classes, the Internet quota is only enough for that.” ... (Assistant Principal 1)
- There should be more cooperation with parents than ever during this period. (Assistant Principal 4)

Need for Ensuring Psychological Well-Being

Another issue that emerged is ECEs’ need for steps to ensure their psychological well-being. Within the scope of this preliminary study, educators indicated that they have negative feelings from time to time because of both the pandemic and the ambiguity of the period. Below are some relevant quotes:

- There can be in-service trainings on the use of technology, but before that, we need to receive psychological support. (Teacher 3)
- I had different feelings at the same time. Ambivalence, being ignored with respect to my profession, anxiety, fear. The period of distance education bothered, but face-to-face education scared because of the disease. (Teacher 6)
- It is a difficult time in all terms. It is a very different period and more challenging than other times. (Teacher 10)
- Stress and bad temper. Our efforts to fulfil everything properly also exhausted us. (Assistant Principal 3)

Conclusion, Discussion, and Recommendations

The COVID-19 pandemic has fundamentally affected numerous aspects of life. One of these aspects is education. Upon the breakout of the pandemic, significant changes were compulsorily introduced in education all over the world, and distance education has turned out to be the dominant means of education. This is an unprecedented case, especially for ECE. Educators around the world were unprepared for this exceptional phenomenon, and so they face many difficulties sustaining education and adapting to new teaching methods (United Nations (UN), 2020). For the purpose of overcoming these difficulties, which requires a common effort, it is of vital importance to identify the needs of educators and to develop and implement the corresponding action plans. As a part of this first step, the current study aimed to identify ECEs’ needs during the distance education period imposed by the COVID-19 pandemic.

It is a known fact that most ECEs had no experience in distance education, which is an unusual means of education for young children (Gestardo, 2020, as cited in Campos & Viera, 2021; Yıldırım, 2021). As stated by Darling-Hammond and Hyler (2020), the new circumstances have created many new needs for teachers and school administrators, and the current study has revealed that ECEs need efforts and practices that support their psychological well-being while helping them improve their technological competencies, increase the number of interactive resources, establish a user-friendly distance education platform, and serve

families. Meeting all these needs is crucial to high-quality early childhood distance education.

Because of the COVID-19 pandemic, distance education has been adopted in ECE, and technology has proved to be its fundamental component. It is known that teachers can provide young learners with various meaningful learning experiences by creating technology-based learning environments and developmentally appropriate learning activities for children. (Keengwe & Onchwari, 2009). However, teachers must have the necessary technological skills to do this. It was discovered through the current study that ECEs need to improve their technological skills in order to carry out effective activities for children during the distance education process. This need among teachers has also been revealed by other studies. The Starting Strong Teaching and Learning International Survey (TALIS Starting Strong) has drawn attention to a similar point, emphasizing that in all countries included in the report, ECEs feel less confident about the use of technology to enrich and support students' learning (OECD, 2020). Similarly, Keengwe and Onchwari (2009) have stated that ECEs experience various difficulties using and integrating technology. Likewise, it was concluded in a study focusing on the experiences of ECEs in distance education that teachers need training in technical and technological issues (Dayal & Tiko, 2020). In this context, it is of great importance to provide educators with professional development opportunities through various distance education strategies and to support them in improving their technological competence.

Another finding of the current study shows that teachers need interactive resources to provide high-quality distance education that is attractive and meaningful to children. In the context of ECE, interactive resources foster effective learning and development when they are used by educators in a purposeful manner within the framework of developmentally appropriate practices (NAEYC, 2012). Just like the interaction with teachers or peers, the engagement with interactive resources deepens the learning process and is a fundamental element of high-quality distance education (Darling-Hammond et al., 2020). As important as the use of interactive resources in distance education is the inclusion of materials that are developmentally appropriate for children. For this reason, ECEs must be provided with information and resources regarding interactive tools. It is critically important to support educators in the procurement of available, affordable, and accessible interactive resources (NAEYC, 2012). In this regard, government agencies, non-governmental organizations, and content producers of ECE bear an important responsibility.

Distance education requires an easy, fast, and reliable process of communication and interaction among all partners in education. The participant educators in this study who expressed their opinions on the current

implementations in Turkey have underlined the need for a user-friendly platform specifically designed for education at the early childhood level. This platform would need to ensure the interaction between child and teacher, child and child, teacher and family, family and family, and teacher and teacher. Teachers feel the necessity of tools that would enable them to learn from each other, which would allow, for example, an innovative implementation used or created at a certain school to be adopted in another school (Fay et al., 2020). From this perspective, it can be said that such an online platform has the potential to contribute to the process of propagating good practices in early childhood distance education and increasing the quality of education all around the country.

Switching to distance education in ECE has made it more necessary than ever to ensure cooperation between teacher (school) and family, which is an important indicator of a high-quality ECE. The fact that young children need their families' support in distance education has turned parents into a necessary component of education (Lau & Lee, 2020). However, it is known that most parents have difficulties fulfilling this new role (Dong et al., 2020), which can be challenging especially for those parents who work or look after more than one child or a child with special needs (Lee et al., 2021). The fact that families need various kinds of support in this new role has brought along a great number of extra duties for teachers, such as directing families or giving them information. This study has revealed that it is necessary to take steps to alleviate these extra duties in distance education, which is already an exceptional and unfamiliar situation. Within the scope of this study, it can be stated that this need can be filled by learning where families need support and then carrying out various informative and supportive programmes by holding online family meetings via school counselling services or by taking advantage of mass media tools such as television or radio. However, it is important to hold these meetings and implement these programmes at times that are appropriate for parents.

Moreover, it is well known that the COVID-19 pandemic has created negative feelings such as anxiety, fear, worry, and uncertainty, and confronted many people with job loss, problems with unemployment insurance, compulsory unpaid leave, or the impossibility of working due to social distancing measures (Ares et al., 2021). As they do in usual times, teachers are taking families and children as a whole during the pandemic and continue to support families in this way. For this reason, in-service trainings on issues such as communication with families, parenting education, or directing families to the correct resources can be arranged so that teachers can provide more effective support. On some occasions, families may need support that goes beyond teachers' competence. Teachers should be informed about how to direct families to the necessary services.

As one might expect, the negative conditions created by the COVID-19 pandemic are also true for teachers. Feeling emotionally tired, suffering from anxiety about keeping themselves and their family members safe or from grief over the loss of a close person, sensitively managing their relationships with their children at home as a parent, or lacking emotional interaction with colleagues, students, and friends might cause teachers to suffer from stress during this time (Soldatelli, 2020, as cited in Ares et al., 2021). It has been concluded in this study that one of educators' basic needs during the COVID-19 pandemic is to ensure their psychological well-being. Providing teachers in need with free support would help them cope with negative feelings. Therefore, it is thought that initiatives by MoNE for ECEs to meet with psychological counsellors would contribute to the well-being of teachers and thus of children. These initiatives can be realized through cooperation with universities or non-governmental organizations and by engaging the support of psychological counsellors working in the field of education and health care. Moreover, online psychological counselling services have become more common since the breakout of the pandemic. For instance, within the framework of a project conducted in Turkey, a free online self-help intervention platform, based on cognitive behavioural therapy, has been founded to help individuals overcome psychological problems that are likely to arise or intensify due to the pandemic (see <https://kendikendineyardim.anadolu.edu.tr>). Raising awareness and expanding the use of such implementations among teachers can contribute to their well-being, which supports children and their families and thus society as a whole. For this reason, it is critically important to inform teachers of such Web-based projects to help ensure that they benefit from these services.

The main motivation behind this study is to contribute to improving the quality of distance ECE practices. Quality education is one of the United Nations' Sustainable Development Goals (SDGs), namely SDG4, to "ensure inclusive and equitable quality education and promote lifelong learning opportunities for all" (UN, 2015). This goal is on the agenda in many countries, and SDG4 focuses on increasing the supply of qualified teachers as one of the prerequisites for high-quality education. Especially in the context of the COVID-19 pandemic, this target requires urgent action from all. As stated, ECEs have the potential to contribute enormously to global recovery after the pandemic by helping lay down strong foundations for the future (Murray, 2020); however, it is known that during the pandemic, educators were expected to immediately start implementing distance education methods without being provided with enough guidance, training, or resources (UN, 2020). Thus, the needs of ECEs regarding distance education that were revealed in this study provide a basis for governments, stakeholders, and key partners to develop and implement action plans to

contribute high-quality distance ECE. Future studies might promote the implementation of action plans to meet the needs of ECEs and subsequently evaluate the effectiveness of the implementations.

Although the goal was to ensure maximum variation within the framework of this study, many teachers work under different conditions, face different challenges, and have different needs than what is true for the participants of this study. It is necessary to first reveal all these needs by conducting different studies and then to fulfil them effectively. Future studies with diverse and large samples that allow generalization might shed light on this issue. Furthermore, because the only means of data collection in this study were individual and focus group interviews, future research using different data collection techniques and triangulating data could handle the topic from a broad perspective. All kinds of studies and projects in this direction constitute steps towards ensuring accessible and high-quality education for all children. For this reason, it is imperative to conduct the necessary research into the fundamental role of teachers, of which the COVID-19 pandemic has reminded us.

Acknowledgements I am thankful to Prof. Dr. Alper Tolga Kumtepe for encouraging me to conduct this study, to Aysun Bay Dönertaş, MA, for providing invaluable insights, and to the early childhood educators for their participation.

Declarations

Conflict of interest The author declares that she has no conflict of interest.

References

- Eğitim Bilişim Ağı [Education Informatics Network]. (2020). *TRT EBA TV Ders Yayını* [TRT EIN TV lesson broadcast]. <http://www.eba.gov.tr/>
- Ares, G., Bove, I., Vidal, L., Brunet, G., Fuletti, D., Arroyo, Á., & Blanc, M. V. (2021). The experience of social distancing for families with children and adolescents during the coronavirus (COVID-19) pandemic in Uruguay: Difficulties and opportunities. *Children and Youth Services Review*, 121, 105906. <https://doi.org/10.1016/j.childyouth.2020.105906>
- Atilas, J. T., Almodóvar, M., Chavarría Vargas, A., Dias, M. J., & Zuniga Leon, I. M. (2021). International responses to COVID-19: challenges faced by early childhood professionals. *European Early Childhood Education Research Journal*, 29(1), 66–78. <https://doi.org/10.1080/1350293X.2021.1872674>
- Campos, M. M., & Vieira, L. F. (2021). COVID-19 and early childhood in Brazil: Impacts on children's well-being, education and care. *European Early Childhood Education Research Journal*, 29(1), 125–140. <https://doi.org/10.1080/1350293X.2021.1872671>
- Darling-Hammond, L., & Hyler, M. E. (2020). Preparing educators for the time of COVID... and beyond. *European Journal of Teacher Education*, 43(4), 457–465. <https://doi.org/10.1080/02619768.2020.1816961>
- Darling-Hammond, L., Schachner, A., & Edgerton, A. K. (with Badrinarayan, A., Cardichon, J., Cookson, P. W., Jr., Griffith, M.,

- Klevan, S., Maier, A., Martinez, M., Melnick, H., Truong, N., Wojcikiewicz, S.). (2020). *Restarting and reinventing school: Learning in the time of COVID and beyond*. Palo Alto, CA: Learning Policy Institute. https://restart-reinvent.learningpolicyinstitute.org/sites/default/files/product-files/Restart_Reinvent_Schools_COVID_REPORT.pdf
- Dayal, H. C., & Tiko, L. (2020). When are we going to have the real school? A case study of early childhood education and care teachers' experience surrounding education during the COVID-19 pandemic. *Australasian Journal of Early Childhood*, 45(4), 36–347. <https://doi.org/10.1177/1836939120966085>
- Dias, M. J., Almodóvar, M., Atilas, J. T., Vargas, A. C., & Zúñiga León, I. M. (2020). Rising to the Challenge: Innovative early childhood teachers adapt to the COVID-19 era. *Childhood Education*, 96(6), 38–45. <https://doi.org/10.1080/00094056.2020.1846385>
- Dong, C., Cao, S., & Li, H. (2020). Young children's online learning during COVID-19 pandemic: Chinese parents' beliefs and attitudes. *Children and Youth Services Review*, 118, 105440. <https://doi.org/10.1016/j.childyouth.2020.105440>
- Fay, J., Levinson, M., Stevens, A., Brighouse, H., Geron, T., & Fellow, P. (2020). *Schools during the COVID-19 pandemic: sites and sources of community resilience*. (COVID-19 Rapid Response Impact Initiative White Paper 20). Edmond J. Safra Center for Ethics at Harvard University. <https://ethics.harvard.edu/files/center-for-ethics/files/20schoolsduringpandemic2.pdf?m=1592232939>
- Johnson, R. B., & Christensen, L. (2014). *Educational research: Quantitative and qualitative approaches*. Sage.
- Keengwe, J., & Onchwari, G. (2009). Technology and early childhood education: A technology integration professional development model for practicing teachers. *Early Childhood Education Journal*, 37(3), 209–218. <https://doi.org/10.1007/s10643-009-0341-0>
- Kim, J. (2020). Learning and teaching online during Covid-19: Experiences of student teachers in early childhood education practicum. *International Journal of Early Childhood*, 52, 145–158. <https://doi.org/10.1007/s13158-020-00272-6>
- Lau, E. Y. H., & Lee, K. (2020). Parents' views on young children's distance learning and screen time during COVID-19 class suspension in Hong Kong. *Early Childhood and Development*. <https://doi.org/10.1080/10409289.2020.1843925>
- Lee, S. J., Ward, K. P., Chang, O. D., & Downing, K. D. (2021). Parenting activities and the transition to home-based education during the COVID-19 pandemic. *Children and Youth Services Review*, 122, 105885. <https://doi.org/10.1016/j.childyouth.2020.105585>
- Merriam, S. B. (2009). *Qualitative research: A guide to design and implementation*. Jossey-Bass.
- Milli Eğitim Bakanlığı [Ministry of National Education]. (2020a, September, 11). *Okul öncesi eğitim ve 1. sınıflar yüz yüze eğitime başlıyor* [Face-to-face education is starting for preschools, kindergartens and first grades]. <https://www.meb.gov.tr/okul-oncesi-egitim-ve-1-siniflar-yuz-yuze-egitime-basliyor/haber/21614/tr>
- Milli Eğitim Bakanlığı [Ministry of National Education]. (2020b, October, 8). *Okullarda yüz yüze eğitimde ikinci aşama 12 Ekim Pazartesi günü başlıyor* [Second stage of face-to-face education is starting at schools on Monday, 12th of September]. <https://www.meb.gov.tr/okullarda-yuz-yuze-egitimde-ikinci-asama-12-ekim-pazartesi-gunu-basliyor/haber/21776/tr>
- Milli Eğitim Bakanlığı [Ministry of National Education]. (2020c, November, 18). *Uzaktan Eğitim Sürecinin Detayları* [Details of Distance Education]. <http://www.meb.gov.tr/uzaktan-egitim-surecin-detaylari/haber/21990/tr>
- Milli Eğitim Bakanlığı [Ministry of National Education]. (2020d, December, 2). *Okul öncesinde uzaktan eğitimi* [Distance education in preschools]. http://sinopcumhuriyetilkokulu.meb.k12.tr/icerikler/okul-oncesinde-uzaktan-egitim_10372848.html
- Murray, J. (2020). In a time of COVID-19 and beyond, World needs early childhood educators. *International Journal of Early Years Education*, 28(4), 299–302. <https://doi.org/10.1080/09669760.2020.1839830>
- National Association for the Education of Young Children (NAEYC). (2012). *Technology and interactive media as tools in early childhood programs serving children from birth through age 8*. https://www.naeyc.org/sites/default/files/globally-shared/downloads/PDFs/resources/topics/PS_technology_WEB.pdf
- OECD. (2020). *Building a high-quality early childhood education and care workforce: Further results from the starting strong survey 2018*. Paris: TALIS, OECD Publishing. <https://doi.org/10.1787/b90bba3d-en>
- Patton, M. C. (2014). *Qualitative research & evaluation methods: Integrating theory and practice*. Sage.
- World Health Organization. (2020a, January 30). *Statement on the second meeting of the International Health Regulations (2005) Emergency Committee regarding the outbreak of novel coronavirus (2019-nCoV)*. [https://www.who.int/news/item/30-01-2020-statement-on-the-second-meeting-of-the-international-health-regulations-\(2005\)-emergency-committee-regarding-the-outbreak-of-novel-coronavirus-\(2019-ncov\)](https://www.who.int/news/item/30-01-2020-statement-on-the-second-meeting-of-the-international-health-regulations-(2005)-emergency-committee-regarding-the-outbreak-of-novel-coronavirus-(2019-ncov))
- Teddlie, C., & Tashakkori, A. (2009). *Foundations of mixed methods research: Integrating quantitative and qualitative approaches in the social and behavioral sciences*. Sage.
- Thomas, D. R. (2003). *A general inductive approach for qualitative data analysis*. New Zealand: School of Population Health, University of Auckland.
- United Nations (UN). (2015). *Transforming our world: the 2030 Agenda for sustainable development*. A/RES/70/1. <https://sustainabledevelopment.un.org/content/documents/21252030%20Agenda%20for%20Sustainable%20Development%20web.pdf>
- United Nations (UN). (2020). *Policy brief: Education during COVID-19 and beyond*. https://www.un.org/sites/un2.un.org/files/sg_policy_brief_covid-19_and_education_august_2020.pdf
- World Health Organization. (2020b, March 11). *WHO Director-General's opening remarks at the media briefing on COVID-19- 11 March 2020*. <https://www.who.int/director-general/speeches/detail/who-director-general-s-opening-remarks-at-the-media-briefing-on-covid-19---11-march-2020>
- Yıldırım, B. (2021). Preschool education in Turkey during the Covid-19 pandemic: A phenomenological study. *Early Childhood Education Journal*. <https://doi.org/10.1007/s10643-021-01153-w>

Publisher's Note Springer Nature remains neutral with regard to jurisdictional claims in published maps and institutional affiliations.