COVID-19 and Primary School 1st Grade in Turkey: Starting Primary School in The Pandemic Based on Teachers' Views

Mustafa FIDAN

Abstract:
The COVID-19 pandemic initiated an extensive and sudden digital transformation in the education. Suddenly, an entire of students had to start managing and mastering with digital tools to participate in their compulsory basic education. In this study, starting primary school first grade remotely is examined according to teachers' views. The research method is qualitative phenomenology study. The study group consists of nine teachers determined by the maximum variation sampling method, which is one of the purposeful sampling types. Three of these teachers work in the village, three in the city center, and three in a private school. The data collected from teachers with the interview technique were analyzed using content analysis. According to the results of the research, teachers' views on remote teaching in the first grade of primary school were divided into two groups, positive and negative. While teachers have positive views in the parent participation, academic and convenience themes, they have negative views in the social, equal opportunity, psychology and academic themes. The experiences of teachers in the first grade of primary school show that first reading and writing can be achieved remotely. It is very important to reduce the social, psychological and equal opportunity problems.

Keywords: Covid 19, emergency remote teaching, primary school, 1st grade,
There has been an ongoing debate over whether remote teaching is beneficial for young children. When the literature was examined, it was seen that remote teaching was generally carried out in universities until the pandemic (Simonson et al., 2019). Remote teaching includes certificate programs, supportive programs, master-doctorate programs and specialist programs, up to the pandemic (Allen & Seaman, 2005). Remote teaching studies are not common at primary school level. Since remote teaching is carried out in universities and lifelong learning, remote teaching studies are also concentrated at this level. Remote teaching studies in primary schools were rarely seen in the literature before pandemic (Çoruk & Çakır, 2017; Karaman & Akgül, 2015; Lee et al., 2013). These studies focus on the feasibility of remote teaching in primary schools. In related studies, remote teaching is considered only as a support to face-to-face education. Before the pandemic, there was no comprehensive example of remote teaching at primary school level.

After the pandemic, primary school suddenly turned into emergency remote teaching, which is a different form of remote teaching. Therefore, emergency remote teaching studies have been included in the literature. In the study by Kim (2020), it is stated that emergency remote teaching offers important opportunities in early childhood. In another study, it is emphasized that these children start life with technologies and therefore they can easily adapt to emergency remote teaching (Livari, Sharma & Ventä-Olkkonen, 2020). Teachers define emergency remote teaching as an opportunity, as they ensure the continuation of education under pandemic conditions despite its many negative aspects (Fidan, 2020).

In the literature, there are studies aimed at determining teachers’ views on the pandemic process. Many teachers state that their experience with emergency remote teaching provides important indicators that can help further improve online learning approaches with young children (Kruszewska, Nazaruk & Szewczyk, 2020). It is also mentioned in the studies that the rush in the first period of the pandemic has been overcome and the new normal conditions in education (Korkmaz & Toraman, 2020). In similar studies, it is emphasized that emergency remote teaching, which started as a necessity, should be evaluated from a broad perspective. Within this framework, it is recommended to develop redesigned emergency remote teaching and better solutions regarding the ongoing process (Bozkurt & Sharma, 2020).

Studies on the first grade of primary school are also seen in the literature. In the study conducted by Sirem and Baş (2020), students whose schools are closed while attending the first year of primary school are examined. The results of the study reveal data on the positive support of emergency remote teaching for 1st grade students who have reading problems. In the study conducted by Bao et al. (2020), first reading activities are tried to be gained by emergency remote teaching. When the results of the study are compared with the previous scientific data obtained in face-to-face education, a decrease of 31% is observed. These findings show that emergency remote teaching cannot replace face-to-face education at the first grade level of primary school.

In the light of scientific data, the education ministry decided to have a face-to-face education for the first grade, even for one day. A hybrid model was conducted in the first grade of primary school between 21 September and 13 November (one-day face to face four days remotely) (MEB, 2020b). Before the pandemic, hybrid education explains that 31-79% of the education is done remotely (Allen & Seamen, 2005). In the pandemic, hybrid education is carried out as 80% emergency remote teaching and 20% face-to-face education.

On the other hand, in the literature, it is stated in studies on primary school first grade that one activity supports another. According to the results of the study conducted by Malpique et al. (2020), the practicality obtained in the first writing skills positively affects the first reading skills. Anwar et al. (2020), on the other hand, focus on teaching mathematics by designing mobile games at the first
grade level. The findings of the study indicate that virtual applications, games and content suitable for digital children of this age can be produced and therefore children can learn without realizing.

In a study conducted by Wollscheid et al. (2016) before the pandemic, 1st grade writing education was examined online and face to face comparatively. Accordingly, writing exercises with pen and paper are recommended rather than online. The online education that emerged with the pandemic is accepted as a compulsory savior, not an option (Rose, 2020). It is predicted that online education, which is mandatory during the pandemic period, will be used more in the near future (Keskin & Kaya, 2020).

This mandatory digital transformation in education is studied by researchers. The emphasis is on supporting primary school first grade children to manage and master their digital futures. In this context, the focus is on empowering teachers, schools and teacher education to act as leaders of the digital transformation of education (Iivari, Sharma, & Ventä-Olkkonen, 2020). In addition, in the context of digital transformation, it is emphasized that students' feelings, emotional states and communication should be given importance (Bozkurt & Sharma, 2020). When the studies in the literature are examined, there is no study on students who started primary school first grade with remote teaching. There is a gap in the literature in the context of the situation in the first grade of primary school. This study examines the starting to primary school 1st grade during the pandemic period. For this purpose, answers to the following questions are sought:

- What are the positive aspects of starting primary school 1st grade with emergency remote teaching?
- What are the negative aspects of starting primary school 1st grade with emergency remote teaching?

2. Method

The phenomenology design was used in this qualitative study. Phenomenology design is a research strategy conducted with the aim of revealing teachers' experiences in the context of starting primary school with emergency remote teaching (Creswell & Poth, 2016).

Study Group

Primary school 1st grade teachers were determined as the study group by using maximum variation sampling method, which is one of the purposeful sampling types. Participants are 9 teachers who experienced the distance education process in their own contexts in the 2020-2021 academic year. Three of the participants are village school teachers, three are metropolitan center public school teachers and three are private school teachers. In this way, it is aimed to reach the best answers about research problems by including participants with certain characteristics (Creswell & Poth, 2016). The average age of the teachers in the study group was calculated as 24 (village), 37 (center) and 29 (Private). First grade, average number of students in the class, 13 (village), 34 (center), and 15 (private). The teachers who participated in the interviews were coded between T1-T3 in the village school, between T4-T6 in the central state school and between T7-T9 in collages.

Data Collection and Analysis

Research data were collected by online data collection method. This method has been used in the field of information technologies in the 2000s and has been used in all areas in recent years. There is an increasing trend of online data collection method in pandemic conditions. Online methods are recommended for researchers who have difficulties especially in qualitative studies due to social distance (Lobe, Morgan & Hoffman, 2020).
Research data were collected by video conference. Video conferencing platforms (the most common Zoom) offer features such as audio and video recording and one-click access (Lobe, Morgan & Hoffman, 2020). Teachers’ opinions were collected using an open-ended interview form in which two questions were included in the video conference calls. These questions are stated below:

- What are the positive aspects of emergency remote teaching in primary school first grade?
- What are the positive aspects of emergency remote teaching in primary school first grade?

In data analysis, content analysis was used in the phenomenological reduction attitude based on search principles for explanation and most literal meanings (Giorgi, 1997). All interviews conducted in this study have been transcribed. The codes were determined as a result of reading the transcribed data set and literature. After the data set was coded, similar codes were combined in appropriate themes. The classified codes were checked and rearranged again. Finally, the findings were revealed.

3. Findings

In this study, the questions determined as a result of the literature review were asked to the teachers working in the village school, metropolitan center schools and private schools. In this framework, the data obtained from all participants were analyzed with content analysis and listed under titles.

Positive aspects of emergency remote teaching in the first grade of primary school.

The researcher first asked the participant teachers the following question: "What are the positive aspects of emergency remote teaching in the first grade of primary school?" The data obtained after the interviews were analyzed by content analysis. The positive results in teachers’ opinions are given in Table 1:

| Theme                  | Code                      | Village | Central | Private |
|------------------------|---------------------------|---------|---------|---------|
| Parent involvement     | Control / feedback        | 15      | 12      | 17      |
|                        | Preparation for the lesson| 11      | 13      | 10      |
|                        | Getting to know the student| 3       | 5       | 5       |
| Academic               | First reading             | 11      | 16      | 10      |
|                        | Oral communication        | 7       | 2       | 16      |
|                        | Math                      | 3       | 9       | 10      |
| Convenience            | Class management          | 3       | 2       | 6       |
|                        | Technological             | 7       | 3       | 5       |
|                        | Time management           | 5       | 3       | 13      |

As seen in Table 1, teachers’ positive opinions are explained with 9 codes in parent involvement, academic and convenience themes. Parent involvement theme consists of control / feedback, lesson preparation and getting to know the student. The teachers’ statements regarding the parent involvement theme are as follows:

"In my opinion, parents are the determinants of distance lessons. In other words, if the parent is aware of the process and is in contact with me, that child has started to read. But my students, whose parents I cannot reach, continue to have problems. T8"

"Parents have become our hands. They have the flesh and bone of the student. We can teach thanks to them. Communication used to be sufficient, whether once a week or a month. Now every day we
are in contact with almost every lesson. Thus, we had the opportunity to get to know both parents and students better. T4 "

Teachers stated the most positive opinions in the academic theme after the parent involvement theme. In the academic theme, there are positive opinions on the codes of first reading, oral communication and mathematics. In other words, teachers perceive these three codes positively with emergency remote teaching in the first grade of primary school. Examples of teacher opinions for the academic theme are given below:

"There was generally no problem academically. I am a teacher in a village school. There were no technological facilities in my classroom. Now I can show many different materials on the screen. It was even good for my students with no access problems. But students without internet infrastructure could not even start academically. T3 "

"Reading studies have gotten relatively easy. We planned additional lessons and played various games. Math was also fine. However, the subject of the article did not turn out as we wanted. So holding a pen and writing correctly is at the mercy of parents. Also, the listen and write study was not successful. T6 "

The positive opinions of the teachers were gathered in the third theme of convenience. Classroom management, technological and time management have become easier in the first grade of primary school by remote. Regarding the convenience theme, teachers stated the following:

"Our class size is 37. If we were in normal school, I wouldn't be able to silence anyone. But I can adjust their voices on the computer. Also, students with special needs were no problem. When necessary, they can turn on the microphone and respond. T5 "

"Most students in the village do not have an internet connection. Few students attend online classes. It feels like a private lesson. We do very high quality lessons with 3-4 people. We learn all the content I can find with a small number of people. On the other hand, it is a bad situation for students who cannot attend. T1 "

"I realized how much time was. There used to be an overtime limit. When he was not at the school, there was no teaching. But now I'm planning an evening class. I teach students who are behind on the weekend. In my opinion, learning should not be restricted to working hours. Learning in emergency remote teaching became free. T7 "

**Negative aspects of remote teaching in the first grade of primary school**

Secondly, the following question was asked to the teachers: "What are the negative aspects of emergency remote teaching in the first grade of primary school?" The data obtained through the interviews were analyzed by content analysis. The negative results in teachers' opinions are given in Table 2:

| Theme                  | Code         | Village | Central | Private |
|------------------------|--------------|---------|---------|---------|
| Social                 |              |         |         |         |
| Friendship             | 6            | 10      | 2       |
| Class culture          | 9            | 16      | 2       |
| Negative behavior      | 1            | 2       | 6       |
| Contactless teaching   | 9            | 11      | 6       |
| Technological infrastructure | 13     | 8       | 3       |
| Internet access        | 11           | 9       | 2       |
| Absenteeism            | 12           | 8       | 2       |
| Equal opportunity      |              |         |         |         |
As seen in Table 2, the negative opinions of teachers were explained with 12 codes in social, technology, psychology and academic themes. The social theme consists of codes of friendship, classroom culture, negative behavior and contactless teaching. Some statements regarding the generic theme are as follows:

"Since the students started in groups, they could not meet their classmates as a whole. Unfortunately, we couldn't be class. There are still students who do not know each other's names. Friendship, classroom culture and school atmosphere remained incomplete. T4"

"It is hopeful to see what they learn even under pandemic conditions. But teaching is not just lessons. Contactless and remote teaching is very difficult. Sometimes I feel like I'm robotic and distant from the profession. T2"

Teachers' views are combined in the equal opportunity theme after the social theme. In the equal opportunity theme, the codes of technological infrastructure, internet access and absenteeism are included. Some statements in the technology theme are as follows:

"No participation. They cannot attend classes because of impossibilities. Equality of opportunity is zero. Sometimes our internet connection goes down too. I think it would be very effective if there were infrastructure and everyone could participate. T1"

"I am working in a private school. Technology cost was added to the school cost. Technological tools are very expensive. Internet is also expensive. Free internet is provided for EBA. But private schools do not use it. Access problem means absenteeism. A different problem arises every day. My microphone is broken, my headphones are not working, my camera won't turn on and similar problems are tiring. T8"

Teachers' opinions were combined in the third theme of psychology. The psychology theme includes the psychological problems of parents, students and teachers. The examples of teachers' expressions in the psychology theme are as follows:

"The efficiency in the teaching part is good, but the education part has always remained incomplete. The fact that parents take our place brings along psychological problems. T6"

"Parents are about to explode with workload. The students were bored at home. We are in online classes from morning till night. Communication continues throughout the day with parents, directors, founders, etc. Teaching had been online and in-person hybrid for a short time. Even being in school at least one day a week was psychologically beneficial. T9"

Teachers' views were finally combined in the academic theme. In the academic theme, there are first writing and branch courses codes. Sample statements of the teachers in the academic theme are as follows:

"Branch lessons are fun. Students actually love it. But many parents consider these unnecessary. For this reason, they do not allow him to attend branch courses. T3"

"Unfortunately, students' writing is very bad. I could not be successful in writing skills in distance education. I am directing and parents are checking. We couldn't even be fully effective in holding a
pencil. Writing problem negatively affected some students’ reading. They are more interested in typing with the keyboard. They don’t want to write with pen and paper. T7

4. Discussion and Results

In this qualitative study, the experiences of teachers who started primary school first grade with emergency remote teaching were examined. The findings of this study revealed positive and negative opinions of teachers about the first grade of primary school. The positive opinions of the teachers were explained with a total of 9 codes in the parent involvement, academic and convenience themes. On the other hand, teachers’ negative opinions about distance primary school first grade were explained with a total of 12 codes in the social, equal opportunity, psychology and academic themes. These results were discussed with the literature in order to improve the positive ones and reduce the negative ones. Remotely or face to face, it is thought that current pandemic experiences offer important opportunities for the future of education and the education of future generations (Langlois et al., 2020; Shearer et al., 2020).

Parent involvement theme is the most frequently expressed positive aspect in teachers’ opinions. Teachers stated that they are in communication with parents as never before. Feedback provided by parents and preparing students for the lesson; has made emergency remote teaching positive. In addition, thanks to intensive communication with parents, it became easier to get to know the students. These results coincide with the literature. For example, in the study conducted by Garbe et al. (2020), parent contribution was examined that parents are included in the remote teaching process. Whittle et al. (2020) emphasize the importance of parent participation. Parent participation has been determinant in emergency remote teaching. Similarly, Fidan’s study (2020) emphasizes the increasing role of parents in the pandemic process. Parent involvement has affected all components of education and training.

Teachers’ views show that emergency remote teaching is positive in an academic context. While first reading, verbal communication and mathematics are positive aspects; only the first writing and branch lessons are negative. These results are similar to the studies in the literature. For example, Fidan’s (2020) study results are mostly positive academically. Similarly, the study results of Yurtbakan & Akyıldız (2020) are academically positive. It is predicted that the negativity in first reading and first writing performance can be corrected by practicing (Malpique et al., 2020; Ritchey & Coker., 2014). Therefore, it is thought that this negativity can be eliminated in time. Telli and Altun (2020) emphasize that the rise of remote teaching and will continue to be used after the pandemic. New concepts such as academic motherhood and hybrid teaching are discussed for pandemic and pandemic-like emergency situations. Almanssori & Hillier, 2020; Bergdahl & Nouri, 2020). Therefore, it has been experienced that there are academic options in emergency situations such as a pandemic.

Another positive theme in teachers’ opinions is convenience. Ease of classroom management, technology and time management are positive aspects of emergency remote teaching. These results are supported in the literature. For example, according to Fidan’s (2020) study results, teachers state that emergency remote teaching provides many facilities. In the study of Sokal et al. (2020), teachers’ opinions show that classroom management is easier. In a similar study, teachers positively expressed the help of parents in classroom management (Lathifah et al., 2020). In addition, emergency remote teaching is positively noted with its time management and technological facilities (Hebebci et al., 2020). It is stated that the time loss in face-to-face education is not in emergency remote teaching (Suryaman et al., 2020). In addition, it is stated that the technological advantages of remote teaching offer great opportunities (Scull et al., 2020; Sharif et al., 2020). Based on the literature data and the findings of this study, it can be said that teachers tend to use opportunities. Teachers are aware of the convenience provided by emergency remote teaching.
On the other hand, there are negative aspects of emergency remote teaching in teachers’ views. Teachers state that emergency remote teaching is negative in the social theme. The codes of friendship, classroom culture, negative behavior and non-contact teaching were negatively expressed. These results are consistent with existing studies in the literature. For example, it is stated that school concepts moved to the house due to the stay at home during the pandemic period (Almanssori & Hillier, 2020). Socially negative results are observed in studies emphasizing that education has undergone a great transformation (Dwivedi et al., 2020). Students’ staying at home, decrease in friendships and behavioral disorders are some of the social negativities (Schleicher, 2020).

Teachers stated negative opinions in the theme of equality of opportunity. Technological infrastructure, internet access and absenteeism negatively affect equal opportunities. This finding fully coincides with the literature. For example, in the study by Aguliera and Nightengale-Lee (2020), it is stated that some well-intentioned sudden decisions negatively affect the equal opportunity. According to the study, sudden closure decisions during the pandemic period have produced different results in rural and urban areas. In addition, according to Fidan’s (2020) study results, access to emergency remote teaching and absenteeism is an important problem. It is stated that the pandemic offers opportunities to rapidly solve all these problems (Langlois et al., 2020).

Teachers also have negative views in the psychology theme. Based on teachers’ opinions, it can be said that parents, students and teachers have various psychological problems. These results are supported in the literature. For example, Akat & Karataş (2020) in their studies examining the psychological effects of the pandemic; They talk about short and long term psychological effects. According to the study, it is stated that psychological problems will be seen more clearly after the pandemic is over. Similar study results show deterioration of parents’ psychological health, behavioral problems of children, and burnout of teachers (Gassman-Pines et al., 2020; Patrick et al., 2020). After the pandemic is over, it is predicted that the focus will be on social and psychological problems rather than academic problems (Bozkurt & Sharma, 2020). Therefore, psychological problems of parents, teachers and students should be supported.

The results of the study show the positive and negative aspects of starting primary school with emergency remote teaching. In other words, emergency remote teaching has positive and negative aspects in the first grade of primary school. It is unclear how long pandemic conditions will last. Accordingly, increasing the positive aspects and decreasing the negative aspects is the first recommendation of this study. Three negative aspects were identified in the study findings: social, equal opportunity and psychological. Essentially, these negativities are to some extent related to pandemic constraints. Therefore, these problems may not end exactly before the restrictions are over. It can be suggested that teachers, parents and administrators cooperate to reduce social and psychological negativities. Finally, face-to-face teaching may be recommended several days a week to increase equal opportunity.

References
Aguliera, E., & Nightengale-Lee, B. (2020). Emergency remote teaching across urban and rural contexts: perspectives on educational equity. *Information and Learning Sciences*. 121(5), 471-478
Akat, M. & Karataş, K. (2020). Psychological effects of COVID-19 Pandemic on society and its reflections on education. *Turkish Studies*, 15(4), 1-13. https://dx.doi.org/10.7827/TurkishStudies.44336
Allen, I. E., & Seaman, J. (2005). *Growing by degrees: Online education in the United States*. Sloan Consortium (NJ1). https://eric.ed.gov/?id=ED530062
Almanssori, S., & Hillier, K. M. (2020). Frontline Workers from Home: A Feminist Duoethnographic Inquiry of Mothering, Teaching, and Academia during the Initial Stages of the COVID-19 Pandemic. *Journal of the Motherhood Initiative for Research and Community Involvement*. 11(2), 171-193.
Anwar, N., Kristiadi, D. P., Novezar, F. A., Tanto, P. A., Septha, K., Ardhia, P., ... & Abraham, J. (2020). Learning Math through Mobile Game for Primary School Students. *Sylwan*, 164(5), 346-352.
Bao, X., Qu, H., Zhang, R., & Hogan, T. P. (2020). Modeling Reading Ability Gain in Kindergarten Children during
COVID-19 School Closures. *International Journal of Environmental Research and Public Health*, 17(17), 6371.

Bergdahl, N., & Nouri, J. (2020). Covid-19 and Crisis-Prompted Distance Education in Sweden. *Tech Know Learn.* https://doi.org/10.1007/s10758-020-09470-6

Bozkurt, A., & Sharma, R. C. (2020). Emergency remote teaching in a time of global crisis due to CoronaVirus pandemic. *Asian Journal of Distance Education*, 15(1), i-vi.

Çoruk, H., & Cakir, R. (2017). The Effect of Multimedia Usage on Academic Achievement and Anxiety of Primary School Students. *Turkish Journal of Computer and Mathematics Education*, 8(1), 1-27.

Creswell, J. W., & Poth, C. N. (2016). Qualitative inquiry and research design: Choosing among five approaches. Sage publications

Dwivedi, Y. K., Hughes, D. L., Coombs, C., Constantiou, I., Duan, Y., Edwards, J. S., ... & Raman, R. (2020). Impact of COVID-19 pandemic on information management research and practice: Transforming education, work and life. *International Journal of Information Management*, 55, 102211.

Fidan, M. (2020). Education in the uncertainty of COVID 19: Teachers’ views on emergency remote teaching in primary school. *Uşak University Journal of Educational Research*, 6(2), 24-43.

Garbe, A., Ogurlu, U., Logan, N., & Cook, P. (2020). Parents’ Experiences with Remote Education during COVID-19. *School Closures*. *American Journal of Qualitative Research*, 4(3), 45-65.

Gassman-Pines, A., Ananat, E. O., & Fitz-Henley, J. (2020). COVID-19 and parent-child psychological well-being. *Peditics*, 146(4). https://doi.org/10.1542/peds.2020-007294

Giorgi, A. (1997). The theory, practice, and evaluation of the phenomenological method as a qualitative research procedure. *Journal of phenomenological psychology*, 28(2), 235-260.

Hebebci, M. T., Berliz, Y., & Alan, S. (2020). Investigation of views of students and teachers on distance education practices during the Coronavirus (COVID-19) Pandemic. *International Journal of Technology in Education and Science (IJTES)*, 4(4), 267-282.

Ivivari, N., Sharma, S., & Ventå-Olkkonen, L. (2020). Digital transformation of everyday life–How COVID-19 pandemic transformed the basic education of the young generation and why information management research should care?. *International Journal of Information Management*, 55, 102183.

Karaman, K., & Akgül, I. (2015). Web-based ethical values education application for primary school students. *Journal of Uşak University Social Science*, 8(3), 87-100.

Keskin, M., & Kaya, D. Ö. (2020). Evaluation of Students’ Feedbacks on Web-Based Distance Education in the COVID-19 Process. *İÇUSBFD*, 5(2), 59-67

Kim, J. (2020). Learning and teaching online during Covid-19: Experiences of student teachers in an early childhood education practicum. *International Journal of Early Childhood*, 52(2), 145-158.

Korkmaz, G., & Toraman, Ç. (2020). Are we ready for the post-COVID-19 educational practice? An investigation into what educators think as to online learning. *International Journal of Technology in Education and Science (IJTES)*, 4(4), 293-309.

Kruszewska, A., Nazaruk, S., & Szewczyk, K. (2020). Polish teachers of early education in the face of distance learning during the COVID-19 pandemic—the difficulties experienced and suggestions for the future. *Education* 3-13, 1-12.

Langlois, S., Xyrichis, A., Daulton, B. J., Gilbert, J., Lackie, K., Lising, D., ... & Khalili, H. (2020). The COVID-19 crisis silver lining: interprofessional education to guide future innovation. *Journal of interprofessional care, 34*(5), 587-592.

Lathifah, Z. K., Helmanoto, F., & Maryani, N. (2020). The practice of effective classroom management in COVID-19 time. *International Journal of Advanced Science and Technology*, 29(7), 3263-3271.

Lee, J., Yoon, S. Y., & Lee, C. H. (2013). Exploring online learning at primary schools: students’ perspectives on cyber home learning system through video conferencing (CHLS-VC). *Turkish Online Journal of Educational Technology-TOJET*, 12(1), 68-76.

Lefever, S., Dal, M., & Matthiasdottir, A. (2007). Online data collection in academic research: advantages and limitations. *British Journal of Educational Technology*, 38(4), 574-582.

Lobe, B., Morgan, D., & Hoffman, K. A. (2020). Qualitative data collection in an era of social distancing. *International Journal of Qualitative Methods*, 19, https://doi.org/10.1177/1609406920937875

Malpite, A. A., Pino-Pasternak, D., & Roberto, M. S. (2020). Writing and reading performance in Year 1 Australian classrooms: Associations with handwriting automaticity and writing instruction. *Reading and Writing*, 33(3), 783-805.

MEB. (2020a). The roadmap of the distance education period that will last until September 18. http://www.meb.gov.tr/18-eylule-kadar-surecek-uzaktan-egitim-doneminin-yol-haritasini/haber/21499/tr

MEB. (2020b). Face-to-face education begins in schools. Press release dated 08.09.2020. http://www.meb.gov.tr/okullarda-yuz-yuze-egitim-baslivler/haber/21601/tr

Patrick, S. W., Henkhaus, L. E., Zickafoose, J. S., Lovell, K., Halvorson, A., Loch, S., ... & Davis, M. M. (2020). Wellbeing of parents and children during the COVID-19 pandemic: a national survey. *Pediatrics*, 146(4).

Ritchey, K. D., & Coker Jr, D. L. (2014). Identifying writing difficulties in first grade: An investigation of writing and reading measures. *Learning Disabilities Research & Practice*, 29(2), 54-65.

Rose S. (2020). Medical student education in the time of COVID19. *JAMA*, 323(21), 2131-2132.

Schleicher, A. (2020). The impact of covid-19 on education insights from education at a glance 2020. Retrieved
from oecd.org website: https://www.oecd.org/education/the-impact-of-covid-19-on-education-insights-education-at-a-glance-2020.pdf.

Sculi, J., Phillips, M., Sharma, U., & Garnier, K. (2020). Innovations in teacher education at the time of COVID19: an Australian perspective. Journal of Education for Teaching, 46(4), 497-506.

Sharifi, A., & Khavarian-Garmsir, A. R. (2020). The COVID-19 pandemic: Impacts on cities and major lessons for urban planning, design, and management. Science of The Total Environment, 142391.

Shearer, R. L., Aldemir, T., Hitchcock, J., Resig, J., Driver, J., & Kohler, M. (2020). What students want: A vision of a future online learning experience grounded in distance education theory. American Journal of Distance Education, 34(1), 36-52.

Simonson, M., Zvacek, S. M., & Smaldino, S. (2019). Teaching and learning at a distance: Foundations of distance education. 7th Edition. IAP.

Sirem, Ö., & Baş, Ö. (2020). Distance Education Experiences of Primary School Students with Reading Difficulties in the Covid-19 Process. Electronic Turkish Studies, 15(4), 993-1011.

Sokal, L., Trudel, L. E., & Babb, J. (2020). Canadian teachers’ attitudes toward change, efficacy, and burnout during the COVID-19 pandemic. International Journal of Educational Research Open, 100016.

Suryaman, M., Cahyono, Y., Muliansyah, D., Bustani, O., Suryani, P., Fahlevi, M., ... & Munthe, A. P. (2020). COVID-19 pandemic and home online learning system: Does it affect the quality of pharmacy school learning? Systematic Reviews in Pharmacy, 11(8), 524-530.

Telli, S. G. & Altun, D. (2020). The Coronavirus and the rising of online education. Üniversite Araştırmaları Dergisi, 3(1), 25-34.

Whittle, C., Tiwari, S., Yan, S., & Williams, J. (2020). Emergency remote teaching environment: a conceptual framework for responsive online teaching in crises. Information and Learning Sciences, 121 (5-6), 311-319.

Wollscheid, S., Sjaastad, J., & Tørnte, C. (2016). The impact of digital devices vs. Pen (cil) and paper on primary school students’ writing skills – A research review. Computers & Education, 95, 19-35.

Yurtbakan, E., & Akyıldız, S. (2020). Primary school teachers, primary school students and parents’ views on distance education activities implemented during the Covid-19 isolation period. Electronic Turkish Studies, 15(6), 949-977.