Research Article

Investigation of Special Education Teachers' Online Teaching Experiences during Covid 19 Pandemic

Hüsamettin ERDEMCİ *1 Mithat ELÇİÇEK 2

1 Siirt University, Fine Arts and Design Faculty, Siirt Turkey, *husamerdemci@gmail.com*

2 Siirt University, Fine Arts and Design Faculty, Siirt Turkey, *mithatelcicek@gmail.com*

* Corresponding Author: *husamerdemci@gmail.com*

Article Info	Abstract
	The Covid 19 pandemic, which initially emerged in China at the end of 2019 and was seen in other countries in a short period, adversely affected daily life. The epidemic has also caused various interruptions in terms of education and training activities. Incidental to the discontinuation of face-to-face education in schools, educational activities began to be carried out on online platforms. Many problems arose in this process during which various new experiences had to be coped with by teachers and students. This research aims to reveal the opinions and experiences of special education teachers regarding the online learning-teaching process, which is compulsory due to the pandemic. The research was carried out with 21 special education teachers working in a special education school in the spring term of the 2020-2021 academic year. Within the scope of the research, the data were obtained by using a semi-structured interview form prepared online by the researchers. According to this research study, for which the qualitative research method was preferred, thematic analysis was used to analyze the data. As a consequence of the research study, the opinions and experiences of the participants were gathered under five themes. The results obtained were discussed in comparison with other studies in the literature and suggestions were presented.

To cite this article: Erdemci, H. & Elçiçek, M. (2022). Investigation of special education teachers' online teaching experiences during covid 19 pandemic. *Journal of Computer and Education Research*, *10 (*20), 319-329. https://doi.org/10.18009/jcer.1081755

Introduction

The Covid 19 pandemic, which emerged in China in 2019 and affected all countries shortly afterward also adversely, affected education activities. As in other countries, various measures were taken to prevent and cease the spread of the pandemic in Turkey, and the activities of educational institutions were suspended within the scope of these measures. Although it was tried to resume face-to-face education from time to time carry out education-training activities, the lessons were conducted via online platforms throughout a significant part of the process. The online education process, which differs greatly compared to face-to-face education, has brought along various problems for all stakeholders of the

process, thus teachers and students in particular. Although the pandemic process has affected all educational activities, it is claimed that the degree of the impact is higher regarding certain groups, including individuals who need special education (Kara, 2020). Similarly, Lee (2020) emphasizes that the distance education process poses significant risks for students with special needs. From this aspect, it is important to determine what kind of problems arises in special education during the pandemic process, the experiences of teachers concerning these problems, and their remarks on the process. This study, it was tried to determine the experience and opinions of special education teachers regarding distance education during the pandemic process.

The Turkish Ministry of Education (2018) defines special education as "education carried out inappropriate environments with the help of specially trained personnel and training programs developed to meet the educational and social needs of individuals who differ significantly from their peers in terms of individual and developmental characteristics and educational qualifications". Eurybase (2009) defines students with special needs as individuals who differ from their peers in terms of individual and developmental characteristics and educational qualifications based on different grounds. Based on these definitions, it is understood that the education services offered to students with special needs and the education services offered to other individuals differ. In this context, the effectiveness and efficiency of special education dependon many factors. Mengi and Alpdoğan (2020) state that the successful realization of special education is possible with the cooperation of students, teachers, and parents, however, the most important task falls upon special education teachers. Teacher-student interaction in the classroom environment is crucially important for the social and cognitive development of the student (Farmer et al., 2017). However, along with the transition to distance education in special education due to the pandemic and the implementation of classes on online platforms, the possibility of physical coexistence of students and teachers has been ruled out.

Distance education is a concept that has various definitions throughout the historical process. Moore, Dickson-Deane, and Galyen (2011) define distance education as a modality of education in which the teacher and the student are not corporally together. Online learning, on the other hand, is a concept defined under e-learning and is a method in which an individual's learning and teaching activities can be performed synchronously or asynchronously using the internet (Singh & Thurman, 2019; Tuncay, 2021). During the

compulsory distance education process, the courses were taught online and synchronously.. Once the literature is reviewed, it has been determined that there are studies on the use of technology in special education and online learning in the pre-pandemic period. For example, Catalano (2014), as a consequence of his work conducted with students with different special needs, concluded that distance education organized within the framework of universal design principles will contribute to the learning of students. Keeler and Horney (2007) also determined in their study that distance education courses are qualified to meet the various needs of students with special needs. However, it is apprehended that the special education version of the studies carried out in the pre-pandemic period is not compulsory to be implemented on the online platforms, but rather they are studies carried out for support purposes. For this reason, there is a possibility that the process carried out on online platfroms during the pandemic period and the distance education that was not compulsory before the pandemic may vary. However, Hodges, Moore, Lockee, Trust, and Bond (2020). (2020) argue that effective online learning and teaching are possible provided that various researches, principles, theories, ethical values, and a qualified course design are available. The emergence and spread of the pandemic developed quite rapidly and many countries were caught unprepared. This situation caused delays in the process of accomplishing the necessary planning. The prolongation of the pandemic process has also extended the closure period of schools. According to the UNESCO report (2021), Turkey has been one of the countries where schools were closed for the longest period during this process. It is important to determine how special education activities are carried out, the effectiveness of education, the problems experienced, and what kind of measures can be taken for the future in this process where schools are closed and classes are carried out online. The opinions and experiences of special education teachers, who are the most important addressees of this situation, are of instructive nature. It is understood that studies examining the experience and remarks of special education teachers on the distance education process are currently limited and there is a requirement for further studies on this subject. The aim of the current research, which is shaped within this framework, is to reveal the experiences and opinions of teachers working in special education schools concerning compulsory distance education. In this context, the answer to the question posed as "What are the experiences and opinions of special education teachers regarding online learning and teaching?" has been sought.

Method

Research Design

Concerning to this study, the case study pattern, which is one of the qualitative research methods, was used. The case study is a technique that can be applied with a large population as well as with only one individual, allowing the situation in question to be revealed in detail (Glesne, 2013). In this study, a case study pattern was preferred to reveal the experiences and opinions of special education teachers about distance education in a comprehensive and detailed manner which had been compulsory during the pandemic and carried out in online environments.

Participant

Table 1. Various demographic information of the teachers who participated in the study

Variable		f	%
Gender	Male	12	57
	Female	9	43
Professional Experience	Less than 5 years	9	43
	Between 5-10 years	6	28,5
	More than 10 years	6	28,5

Nine of the teachers in the study are women and twelve are men. Once their professional experience is examined, it is seen that nine teachers have less than five years of professional experience, six of them have 5-10 years of professional experience and six of them have more than ten years of professional experience.

Data Collection Tools and Process

First of all, a semi-structured interview form was prepared for data collection. While preparing the form, opinions were taken from experts specialized in the field of measurement and evaluation, and the final version was prepared and shared with the participants via Google form. The contact information of the researchers is given at the bottom of the form. Thus, the participants were allowed to contact the researchers if they wanted to. Forms were sent to 24 participants in total and they were asked to fill in the form within 15 days. While 21 teachers filled out the form within the specified time, 3 teachers did not. The research was carried out with data obtained from 21 participants.

Data Analysis

The data obtained from the participants were checked and verified one by one and their printouts were taken and analyzed by the researchers. The thematic analysis method

was used for the analysis of the data. Thematic analysis is a suitable analysis method to try to understand the experiences, thoughts, or behaviors in a data set (Kiger & Varpio, 2020). Braun and Clarke (2006) also define thematic analysis as a method used to identify, analyze and report repetitive patterns in a qualitative data set. In this study, thematic analysis was preferred to demonstrate the experiences and opinions of the participants about the online learning process. The thematic analysis consists of six stages: recognizing data, creating codes, searching for themes, reviewing themes, defining-naming themes, and reporting. The data collected online within the scope of the current study were transferred to paper and the participants were coded as O1, O2, O3…. The available data sets were reviewed many times and codes were created. Afterward, themes were created by bringing together each associated code, and the themes were re-checked and renamed. In the last stage of data analysis, reporting was initiated.

Findings

As a result of the data analysis, the experiences and opinions of special education teachers regarding compulsory online learning were gathered under five themes. Findings for each theme were presented, supported by participants' opinions.

Technical, Systematic, and Connection Problems

As a result of the decision that education activities will be carried out using distance education, institutions providing special education have also started to teach courses online. However, it is understood that there are certain technical and systemic problems related to this situation, which is which is unprecedented for nature for both teachers and students. Concerning this obligatory transition, O8's *"… at the beginning of the pandemic, we have seen many times that students could not enter the system"*, O7's *"… the system was disconnected from time to time. There were problems with sound and image"*, O20's *"… Students who did not attend the class had various excuses such as disconnection, internet quota ending…"*, O14's *"… at first, parents could not enter the system. We could not properly have a class with the students."* statements in the form reveal the graveness of this situation. However, it is understood that the technical and systemic problems have been mitigated throughout the process based on the statement of O14 saying that *"the problems related to entering the classes have prominently decreased lately"*.

Problems Arising from the Course Material

As in other institutions, special education courses were also carried out through EBA (Education Information Network). However, the fact that the group in question consisted of students with special needs brought along different problems. It is seen that there are various problems, especially in connection with finding and preparing course materials. About this, O1 said that *"… students' needs are different from other students. The characteristics of our students are also different from each other. It is difficult to find suitable materials for all of them."* Moreover, O9's statement saying that *"… there is not adequate material suitable for our students on the internet and it is difficult for us to get prepared and the existing ones are also insufficient"* indicates that teachers have significant problems in finding and preparing course materials.

Problems Arising from Teachers

In the process, it was determined that there were problems due to the inadequate digital literacy levels of the teachers. For example, O6 said *"I cannot say that I use the computer very well. That's why I had some problems"*, O4 said *"I have never taught in this way before. At first, distance education was very annoying for me"* and these statements reveal that teachers have deficiencies in online course experiences and in using information and communication technologies.

Problems Arising from Teacher-Student Communication

The realization of education of students with special needs through distance education has caused them to encounter various problems, especially on part of special education teachers. One of these problems is the communication problem because the student and the teacher cannot be together in a physical manner. O7 stated that *"…I cannot establish easy communication with the student. Only verbal expressions or gestures and mimics are not enough. When we wanted something from the student, we could explain it by doing or showing it when we were at school."* O20 said, *"It is difficult to explain something to our students with mental, auditory, or different disabilities or to learn what their wishes are while we are sitting in front of the screen. We hardly ever had such problems in the classroom."* The statements in the form indicate that there are problems concerning for to teacher-student communication in the online platform.

Problems Arising from Parents' Cooperation

Another problem encountered in the process of conducting special education online is the unwillingness of parents to cooperate. O9's *"the majority of the parents do not want to*

attend the lesson", O4's *"parents were not much of help to us during the lessons"* and O6's *"most parents considered distance education unnecessary. They did not want to participate"* statements indicate that some of the parents do not want to cooperate with the teachers.

Discussion and Conclusion

This study, it is aimed to reveal the experience and opinions of special education teachers regarding online learning. As a result of the thematic data analysis, five themes emerged: systemic and connection problems, problems caused by inadequate course material, problems arising from teachers, problems arising from teacher-student communication, and problems arising from parents' unwillingness to cooperate. It is understood that the pandemic has significantly affected special education as much as the normal education process.

It is observed that special education teachers have certain concerns about distance education and experience some problems in the process. At the beginning of these problems, it is seen that there are problems related to the system and internet connection. This situation is not unique to special education but is encountered in almost all educational activities conducted online (Azhari & Fajri, 2021). According to most of the studies addressing the problems encountered during the pandemic process, it is seen that the problems arising from the connection and the system come to the fore (Mukuna & Aloka, 2020). It is understood that particularly at the beginning of the pandemic, students and parents experienced various problems in connecting and using the online learning platform, but this situation has gradually been removed in the recent period. The fact that the target audience consists of individuals with special needs has led to the emergence of various problems in terms of communication with the parents, especially aggravated due to inadequate course resources. The report published by the United Nations (UN, 2020) states that the most important barriers in the distance education process are the inability of students with special needs to access the internet access and course materials and equipment. The study conducted by Page, Charteris, Anderson and Boyle (2021) on how special education is conducted during the pandemic process and the problems experienced emphasizes that there are problems arising from the inadequacy of the course material of special education teachers for the target audience, the problems caused by the students' inability to use technological tools, and the problems arising from the fact that students lost track of their usual routine. As a result of his

research, Akmeşe and Kayhan (2020) concluded that individuals with special needs who changed their routines forgot some or all of the skills they have learned in advance. According to the study conducted by Karasel-Ayda, Bastas, Altinay, Altinay, and Dagli (2020), it is stated that besides special education teachers necessary to face challenges concerning lack of interaction, the absence and indifference of parents in the programs, and anxiety arising from failure, special education teachers appreciate distance education since students are not entirely distanced from education and parents' support could be provided. However, within the scope of this study, it was determined that the parents avoided cooperation. However, Cai and Wang (2020) argue that success in special education depends on the cooperation of teachers and families, and this sort of cooperation became even more significant during the pandemic process. Similar to the result of this study, Börnert-Ringleb, Casale, and Hillenbrand (2021) ascertained that the lack of parent cooperation is one of the most important obstacles to special education in the distance education process. Studies through which the process is evaluated on part of the parents are also found once the literature is reviewed. For example, Agaton and Cueto (2021) aimed to determine the pandemic experiences of parents with the help of their study. As a result of the study, it was concluded that parents' financial difficulties, incapacity to use technology, stress levels, personal problems, and inadequate learning outcomes are obstacles to learning in the virtual environment. Some studies demonstrate that the transfer that demonstrate that the transfer of special education to the online platform has certain positive results for parents. Tomaino, Greenberg, Kagawa-Purohit, Doering, and Miguel (2021) concluded that thanks to online learning, parents have the chance to learn more about the education curriculum of their special education children. The similarities and differences between the findings of the current study on parent cooperation and the results of other studies in the literature may be due to social, cultural, and economic differences since the studies were carried out in different countries. Another conclusion reached as a result of this study is regarding the problems arising from the teachers' lack of experience in online teaching and their inability to use digital technologies adequately. Some studies conclude that some of the problems that arise during the pandemic process are caused by the inadequacy of teachers' use of digital technology (Doghonadze, Aliyev, Halawachy, Knodel & Adedoyin, 2020). However, there are also studies carried out during the pandemic that concluded that teachers are ready for

online learning (Dorsah, 2021). It is understood that this situation is related to the participants' age, gender, and having/not having digital devices.

This study, which aims to determine the experiences and opinions of special education teachers concerning online learning/teaching, which is compulsory during the pandemic process, is limited to teachers working in a special education vocational school. Evaluating the education and training process only from the perspective of teachers during the pandemic may be insufficient to analyze the situation. For this reason, it is thought that conducting studies that reveal the experiences and opinions of parents, students and school administrators can help the process to be apprehended thoroughly. Although the pandemic caused disruptions in education services, the experiences gained from the process may also have positive reflections on education (Simó-Pinatella, Goei, Carvalho & Nelen, 2021). When the results of this study and other research results in the literature are evaluated together, it is recommended that the preparation or improvement of course materials on online platforms for students with special needs and studies to improve teachers' digital literacy levels should be carried out in cooperation with the Ministry of National Education and higher education institutions.

Ethical Committee Permission Information

Name of the board that carries out ethical assessment: Siirt University Ethics Committee

The date and number of the ethical assessment decision: 01.07.2021/954

Author Contribution Statement

Hüsamettin ERDEMCİ: *Conceptualization, literature review, methodology, implementation, data analysis, translation, and writing.*

Mithat ELÇİÇEK: *Conceptualization, literature review, methodology, implementation, data analysis, translation, and writing.*

References

Agaton, C. B., & Cueto, L. J. (2021). Learning at home: Parents' lived experiences on distance learning during COVID-19 pandemic in the Philippines. *International Journal of Evaluation and Research in Education (IJERE)*, *10*(3), 901. https://doi.org/10.11591/ijere.v10i3.21136.

Akmeşe, P. P., & Kayhan, H. N. (2020). Özel eğitim öğretmenliği öğrencilerinin koronavirüs (covıd-19) salgın sürecinde uygulama derslerine ilişkin deneyimleri [Experiences of the special education teaching students in the applied courses during coronavirus disease (covid-19) pandemic process]. *Turkish Studies (Elektronik)*, *15*(8), 3669-3688.

Azhari, B., & Fajri, I. (2021). Distance learning during the COVID-19 pandemic: School closure in Indonesia. *International Journal of Mathematical Education in Science and Technology*, 1–21. https://doi.org/10.1080/0020739x.2021.1875072.

Börnert-Ringleb, M., Casale, G., & Hillenbrand, C. (2021). What predicts teachers' use of digital learning in Germany? Examining the obstacles and conditions of digital learning in special education. *European Journal of Special Needs Education*, *36*(1), 80–97.

Braun, V., & Clarke, V. (2012). Thematic analysis. In: Cooper H, editor. *APA handbook of research methods in psychology.* Vol. 2, research designs. Washington (DC): APA

Cai, R., & Wang, Q. (2020). A six-step online teaching method based on protocol-guided learning during the covıd-19 epidemic: A case study of the first middle school teaching practice in Changyuan City, Henan Province, China. *Best Evidence of Chinese Education*, *4*(2), 529–534. https://doi.org/10.15354/bece.20.rp010.

Catalano, A. (2014). Improving distance education for students with special needs: a qualitative study of students' experiences with an online library research course, *Journal of Library & Information Services in Distance Learning*, 8(1-2), 17-31,

Doghonadze, N., Aliyev, A., Halawachy, H., Knodel, L., & Adedoyin, A. S. (2020). The degree of readiness to total distance learning in the face of covid-19 - teachers' view (case of Azerbaijan, Georgia, Iraq, Nigeria, UK and Ukraine). *Journal of Education in Black Sea Region*, *5*(2), 2–41. https://doi.org/10.31578/jebs.v5i2.197.

Dorsah, P. (2021). Pre-service teachers' readiness for emergency remote learning in the wake of covid-19. *European Journal of STEM Education*, *6*(1), 1-12.

Eurybase (2009). *Türk eğitim sisteminin örgütlenmesi [Organization of the Turkish education system]*. Ankara: European Commission.

Farmer, T. W., Dawes, M., Hamm, J. V., Lee, D., Mehtaji, M., Hoffman, A. S., & Brooks, D. S. (2017). Classroom social dynamics management: why the invisible hand of the teacher matters for special education. *Remedial and Special Education, 39*(3), 177–192.

Glesne, C. (2013). *Nitel araştırmaya giriş [Introduction to qualitative research]* (3. b.). (A. Ersoy, & P. Yalçınoğlu, Dü) Ankara: Anı Yayıncılık.

Hodges, C., Moore, S., Lockee, B., Trust, T., & Bond, A. (2020). The difference between emergency remote teaching and online learning. Educause Review, (March 27, 2020). https://er.educause.edu/articles/2020/3/the-difference-   between-emergency-remote-teaching-and-online-learning.

Kara, E (2020). Kovid-19 pandemisindeki dezavantajlı gruplar ve sosyal hizmet işgücünün işlevi [The function of the social service work force during the covid-19 pandemic in disadvantaged groups]. *Türkiye Sosyal Hizmet Araştırmaları Dergisi, 4*(1), 28-34.

Karasel-Ayda, N., Bastas, M., Altinay, F., Altinay, Z., & Dagli, G. (2020). Distance education for Students with special needs in primary schools in the period of covid-19 epidemic. *Propósitos y Representaciones*, *8*(3). https://doi.org/10.20511/pyr2020.v8n3.587.

Keeler, C. G., & Horney, M. (2007). Online course designs: Are special needs being met?. *The American Journal of Distance Education*, 21(2), 61-75.

Kiger, M. E., & Varpio, L. (2020). Thematic analysis of qualitative data: AMEE Guide No. 131. *Medical Teacher*, *42*(8), 846–854. https://doi.org/10.1080/0142159x.2020.1755030

Lee, J. (2020). Mental health effects of school closures during COVID-19. *The Lancet Child & Adolescent Health*, *4*(6), 421.

Mengi, A., & Alpdoğan, Y. (2020). Covid-19 salgını sürecinde özel eğitim öğrencilerinin uzaktan eğitim süreçlerine ilişkin öğretmen görüşlerinin incelenmesi [Investigation of teacher's opinions about distance education processes of students who receive special education during the covid-19 pandemic period]. *Milli Eğitim Dergisi*, *49*(1), 413-437.

Ministry of National Education [MoNE] (2018). Özel eğitim hizmetleri yönetmeliği [Special education services regulation]. https://orgm.meb.gov.tr/meb_iys_dosyalar/2018_07 /09101900_ozel_egitim_hizmetleri_yonetmeligi_07072018.pdf

Moore, J. L., Dickson-Deane, C., & Galyen, K. (2011). e-Learning, online learning, and distance learning environments: Are they the same? *The Internet and Higher Education*, *14*(2), 129–135. https://doi.org/10.1016/j.iheduc.2010.10.001

Mukuna, K. R., & Aloka, P. J. O. (2020). exploring educators' challenges of online learning in covid-19 at a rural school, South Africa. *International Journal of Learning, Teaching and Educational Research*, *19*(10), 134–149. https://doi.org/10.26803/ijlter.19.10.8.

Page, A., Charteris, J., Anderson, J., & Boyle, C. (2021). Fostering school connectedness online for students with diverse learning needs: inclusive education in Australia during the COVID-19 pandemic. *European Journal of Special Needs Education*, *36*(1), 142–156.

Simó-Pinatella, D., Goei, S. L., Carvalho, M., & Nelen, M. (2021). Special education teachers' experiences of addressing challenging behaviour during the pandemic. *European Journal of Special Needs Education*, 1–14. https://doi.org/10.1080/08856257.2021.1963152.

Singh, V., & Thurman, A. (2019). How many ways can we define online learning? a systematic literature review of definitions of online learning (1988–2018). *American Journal of Distance Education*, *33*(4), 289–306.

Tomaino, M. A. E., Greenberg, A. L., Kagawa-Purohit, S. A., Doering, S. A., & Miguel, E. S. (2021). An assessment of the feasibility and effectiveness of distance learning for students with severe developmental disabilities and high behavioral needs. *Behavior Analysis in Practice*. https://doi.org/10.1007/s40617-020-00549-1.

Tuncay, N. (2021). Online education skills of teachers: access, age, gender and language gap. *Journal of Computer and Education Research*, *9* (17), 1-15.

UNESCO. (2021). *Global monitoring of school closures caused by covid-19*. https://covid19.uis.unesco.org/global-monitoring-school-closures-covid19/

United Nations. (2020). *Education during covid-19 and beyond*. https://www.un.org/development/desa/dspd/wpcontent/uploads/sites/22/2020/08/sg_ policy_brief_covid-19_and_education_august_2020.pdf