

Editors:

Dr. Waynne B. James Dr. Cihan Cobanoglu Dr. Muhittin Cavusoglu

# **Co-Editors**

*Dr. Waynne James*, University of South Florida, USA *Dr. Cihan Cobanoglu*, University of South Florida, USA *Dr. Muhittin Cavusoglu*, Northern Arizona University, USA

# ADVANCES IN GLOBAL EDUCATION AND RESEARCH: VOLUME 4

ISBN 978-1-955833-04-2

\*Authors are fully responsible for corrections of any typographical, copyrighted materials, technical and content errors.

# **Co-Editors**

*Dr. Waynne James,* University of South Florida, USA *Dr. Cihan Cobanoglu,* University of South Florida, USA *Dr. Muhittin Cavusoglu,* Northern Arizona University, USA

ISBN 978-1-955833-04-2

#### © USF M3 Publishing 2021

This work is subject to copyright. All rights are reserved by the Publisher, whether the whole or part of the material is concerned, specifically the rights of translation, reprinting, reuse of illustrations, recitation, broadcasting, reproduction on microfilms or in any other physical way, and transmission or information storage and retrieval, electronic adaptation, computer software, or by similar or dissimilar methodology now known or hereafter developed. The use of general descriptive names, registered names, trademarks, service marks, etc. in this publication does not imply, even in the absence of a specific statement, that such names are exempt from the relevant protective laws and regulations and therefore free for general use. The publisher, the authors and the editors are safe to assume that the advice and information in this book are believed to be true and accurate at the date of publication. Neither the publisher nor the authors or the editors give a warranty, express or implied, with respect to the material contained herein or for any errors or omissions that may have been made. The publisher remains neutral with regard to jurisdictional claims in published maps and institutional affiliations.

*This imprint is published by USF M3 Publishing, LLC* The registered company address is University of South Florida, 8350 N Tamiami Tr, Sarasota, FL 34243 USA.

# Assistant Editor

Dr. Alia Hadid, University of Rhode Island, USA

## **Editor** Assistants

Zahra Alrushdy, Bahcesehir University, Turkey Gokhan Sener, Necmettin Erbakan University, Turkey Abraham Terrah, University of South Florida, USA

\*Authors are fully responsible for corrections of any typographical, copyrighted materials, technical and content errors.

# Challenges Affecting Teaching-Learning Processes in Multi-Grade Classes: A Comparison of Pre-Pandemic and Peri-Pandemic Periods

Muhammed Safa Akdaş<sup>1</sup> and Mahmut Kalman<sup>2</sup>

<sup>1</sup>The Ministry of National Education, Turkey

<sup>2</sup>Faculty of Education Gaziantep University, Turkey

#### Abstract

The purpose of the present study is to explore challenges faced by classroom teachers in multigrade classes from a comparative perspective of pre-pandemic and peri-pandemic processes. The qualitative case study was employed as the research design. Nine classroom teachers working in multi-grade classes in a district of southeastern Turkey were recruited using the criterion-based sampling technique. Three focus group interviewing sessions, three teachers in each session, were carried out to gather data. The researchers utilized a semi-structured interview protocol including eight open-ended questions. Data were analyzed using thematic analysis. The themes produced were categorized as challenges before the pandemic, challenges faced in distance education during the pandemic, and challenges faced in face-to-face education during the pandemic. The challenges accentuated most, in the pre-and peri-pandemic periods, were parents' indifference, students' approaches to learning, inappropriate learning materials, frequent electric and water outages, a lack of internet infrastructure, difficulties to ensure social distancing in the classroom, and difficulties to teaching under the pandemic conditions.

Keywords: multi-grade classes, COVID-19 pandemic, classroom teachers, challenges

*Recommended Citation*: Akdas, M. S., & Kalman, M. (2021). Challenges affecting teachinglearning processes in multi-grade classes: A comparison of pre-pandemic and peri-pandemic periods. In W. B. James, C. Cobanoglu, & M. Cavusoglu (Eds.), *Advances in global education and research* (Vol. 4, pp. 1–13). USF M3 Publishing. https://www.doi.org/10.5038/9781955833042

### Introduction

Multi-grade schools refer to small schools that have one classroom staffed by one teacher and enroll students of multiple ages and grade levels (McEwan, 2012). In these schools, two or more grades are educated in the same classroom simultaneously under the guidance of one teacher (Hargreaves, Montero, Chau, Sibli, & Thanh, 2001). İlter (2015) defines multi-grade teaching as an educational implementation that covers providing education to a group of students from different grade levels under the sole responsibility of one teacher in the same classroom. These definitions underline certain characteristics of such classrooms: a single teacher, more than two different grades, a single classroom, and simultaneity. In the related literature, three main reasons are revealed about the rationale behind multi-grade schools. These are the lack of classrooms, which mostly results from insufficient financial resources (Erdem, Kamacı, & Aydemir, 2005); the shortage of teaching staff (Palavan & Göçer, 2017), and the lack of students (Samancı, Ocakcı, & Ocakcı, 2016) which refers to an insufficient number of enrolled students to construct

independent classrooms, especially in rural and dispersedly located settings (Abay, 2007). All these reasons make this educational implementation a necessity. Examples of multi-grade schools can be seen across the world, in many developing and developed countries such as Colombia, Guatemala, and Chile (McEwan, 2012), Maldives (Shareefa, 2021), Vietnam (Aikman & Pridmore, 2001), Africa (Msimanga, 2020), Philippines (Naparan & Alinsug, 2021), Australia (Cornish, 2006), Ireland (Mulryan-Kyne, 2004; Quail & Smyth, 2014) and Turkey (Aksoy, 2008b), among others.

Although the number of multi-grade schools has been decreasing in Turkey in recent years, more than one-fourth of primary schools (28% in the 2017-2018 academic year according to the MoNE statistics) in Turkey are run as multi-grade schools (KODA, 2018). The proportion gives the impression that multi-grade schools still play a significant role in the Turkish education system. Multi-grade schooling helps many students to access education and benefit from educational opportunities in the Turkish education system. However, previous research has indicated that teachers working in multi-grade schools have to deal with various challenges (Özdemir, Özdemir, & Gül, 2020; Taşkaya, Turhan, & Yetkin, 2015). These challenges are reported to cause teachers to experience emotional problems (Dal, 2004; Eriş, Arıcan, & Göksoy, 2015), higher levels of burnout (Şekerci, 2015; Akdağ, 2014) and lower job satisfaction (İnce & Şahin, 2016). These negative issues may lower teacher performance (Şahin, 2003) and, as a result, decrease the quality of education offered. According to Çiftçi and Cin (2018), schools located in rural settings in Turkey suffer from a lack of resources; and the gap in terms of student achievement, teachers' professional satisfaction, and educational quality may be broader thereof.

## **Literature Review**

The virus that emerged in the Wuhan province of China in December 2019 was named Coronavirus (COVID-19) by the World Health Organization (WHO) (Lu, Zhao, Li, Niu, Yang, et al., 2020) and was announced to have transformed into a global pandemic on 12 March 2020 by the WHO (WHO, 2020a). This global pandemic has affected national education systems around the world, and 191 countries decided to interrupt face-to-face education by 17 April 2020 according to a report by the United Nations (Viner, Russell, Croker, Packer, Ward, et al., 2020). Turkey also had to close schools on 16 March 2020 (MONE, 2020a), and school closures lasted until 19 June 2020, the last day of the 2019-2020 education year (Anadolu Ajansı, 2020). The distance education process started on 21 September 2020, and a gradual transition to face-to-face education was put into practice through diluted education starting from that date (MONE, 2020b). At the primary education level, first graders continued their education through distance education, and they also had attended face-to-face education two days a week for three weeks since 21 September 2020 (MONE, 2020c). Other graders continued their education through distance education in this process. After the first three-week period, 2<sup>nd</sup>, 3<sup>rd</sup>, and 4<sup>th</sup> graders started to receive education partly through distance education and partly through face-to-face education. With this process, the schools in villages including multi-grade schools started to provide face-to-face education every day of the week, and central schools offered only a 2-day face-to-face education in a week (MONE, 2020d).

Face-to-face education that lasted for about one and half months was ended on 20 November 2020 due to the spread of the virus, and education was offered through distance education since then (MONE, 2020e). The cautions taken due to the pandemic led to several changes in the education

process. Distance education was implemented as a requirement of this process at all levels of education. Primary-level education was offered as face-to-face more than other education levels, namely middle and secondary education levels. Therefore, rural schools in villages and multi-grade schools had more experience regarding different modes of education (i.e. distance, face-to-face, or hybrid) when compared to central schools.

The global pandemic has affected educational systems deeply, and this necessitates the investigation of the immediate and large effects on all education levels. Research on primary education has focused on classroom teachers' perceptions and experiences of distance education during the pandemic (Karahan, Bozan, & Akçay, 2020; Sönmez, Yıldırım, & Çetinkaya, 2020; Kantos, 2020). Furthermore, some studies examined the views of preservice teachers, parents, and students (Duban & Şen, 2020; Yurtbakan & Akyıldız, 2020; Yolcu, 2020). All these research studies underlined the difficulties caused by the pandemic; however, the challenges faced in educational processes by teachers of multi-grade classes during the pandemic have not been revealed. Dealing with one grade of primary education through distance education has brought about novel challenges due to an obligatory use of distance education. What has happened in the multi-grade classes during the pandemic requires detailed investigation as having more than two grades in one classroom could be rather challenging when the inadequate physical and technological infrastructure of multi-grade classes during the pandemic presents a unique case for scrutinization.

Apart from students and different educational stakeholders, teachers were among the most affected actors in education by the global pandemic of Covid-19. Although research has been conducted on the effects of the pandemic on education, the number of research studies that focus on teachers' experiences during the pandemic is rare (Çiçek, Tanhan, & Tanrıverdi, 2020). During the pandemic, teachers of multi-grade classes taught both face-to-face and online, in a diluted mode when needed. Apart from the challenges faced in pre-pandemic (normal) times, it is deemed significant to reveal how pre-existing challenges affected teacher experiences during the pandemic and if the pandemic has added new challenges to the existing ones. This study set out to reveal the novel challenges as well as existing ones to detect the problems faced and then draw implications to help solve these problems. The research questions sought to be answered are a) What challenges did teachers of multi-grade classes face before the pandemic? b) What challenges have these teachers experienced in face-to-face education during the pandemic? and c) What challenges have these teachers experienced in distance education during the pandemic?

### Methods

A qualitative case study was employed in this research to explore the educational challenges faced by classroom teachers working in multi-grade classes from a comparative perspective covering pre- and peri-pandemic processes. As put by Yılmaz (2013, p.312), qualitative research is a methodological approach that allows investigating "people, cases, phenomena, social situations and processes in their natural settings" to grasp an understanding of meanings that are attached to human experiences of the world. Creswell (2016) explains a case study as an approach to examine a bounded case in-depth. The case study research was used as the challenges classroom teachers encountered were examined within specified time boundaries (pre-and peri-pandemic periods).

### Sample

The researchers used a purposive sampling technique to recruit the participants from among teachers of multi-grade classes working in a district in the southeast of Turkey. The researchers paid attention to select teachers who taught the same class in both pre-and peri-pandemic processes. Although the researchers invited teachers experiencing both processes in multi-grade schools, only nine (N=9) classroom teachers volunteered to participate in the interviews held on Zoom. Teachers' identities were kept confidential, and pseudonyms were used to ensure anonymity. Table 1 demonstrates the demographics of participating teachers.

| Pseudonym | Gender | Age | Seniority | Grades taught | Class size | School SES |
|-----------|--------|-----|-----------|---------------|------------|------------|
| Asu       | Female | 26  | 3 Years   | 1-2           | 20         | Low        |
| Banu      | Female | 26  | 1 Year    | 1-2-4         | 10         | Medium     |
| Ali       | Male   | 29  | 2 Years   | 1-2-3-4       | 23         | Low        |
| Eda       | Female | 31  | 15 Months | 1-2-3-4       | 19         | Low        |
| Akif      | Male   | 25  | 18 Months | 1-2-3-4       | 19         | Low        |
| Asaf      | Male   | 30  | 4 Years   | 1-2-3-4       | 34         | Medium     |
| Ahu       | Female | 25  | 16 Months | 1-2-3-4       | 27         | Medium     |
| Seda      | Female | 25  | 1 Year    | 1-2-3-4       | 21         | Medium     |
| Eymen     | Male   | 25  | 2 Years   | 1-2-3-4       | 13         | Medium     |

**Table 1**. The Demographics of Participating Teachers

As Table 1 demonstrates, four teachers were male, and five teachers were female. Teachers' seniority ranged between 1-4 years. Except for two teachers, seven teachers taught all primary education grades (1-4 grades) in the same classroom. The class sizes were between 10-34 students. School socioeconomic statuses (SES) were reported to be low and medium.

### Data Collection

Data were collected through focus group interviews as this kind of interviewing enables the researcher to collect rich information thanks to group interactions. An interview protocol consisting of 8 open-ended questions written about the educational challenges experienced: general situation, in-class instruction, distance education, curriculum, instructional materials, and students. Probes were used to seek comprehensive information about the challenges faced in educational processes. The researchers carried out the interviews via Zoom on different dates (09/12/2020, 12/12/2020, and 19/12/2020). Research indicates that Zoom can be used to collect and manage qualitative data and has several advantages such as being user-friendly and cost-effective besides providing security options (Archibald, Ambagtsheer, Casey, & Lawless, 2019). The tools like Zoom enable conducting qualitative interviews via online videoconferencing and provide invaluable opportunities to collect data despite the challenges of social distancing (Lobe, Morgan, & Hoffman, 2020). The duration of the interviews was about 300 minutes in total.

### Data Analysis

The collected data were analyzed using thematic analysis. According to Matthews and Ross (2010, p.374), "Thematic analysis is a process, a way of working with data which works from the raw data – the raw verbal or visual data we have gathered – and remains in touch with that raw data throughout". The researchers transcribed the recorded videos verbatim to prevent the loss of data and then analyzed the transcribed text to develop themes and codes based on similarities and differences between the participants' perspectives and experiences.

## **Reliability and Validity**

To ensure reliability and validity, the researchers followed some procedures. Firstly, an expert examined the interview protocol, and a Turkish language teacher examined the comprehensibility of the form. One pilot interview was carried out with one teacher of a multi-grade classroom. Feedback from the expert, pilot study, and linguistic investigation required to make some corrections in the questions and wording of them. The interview protocol was finalized based on the corrections made. The researchers arranged the dates of the interviews in line with teachers' availability. During the interviews, the first few minutes were used for teachers' feeling relaxed. Participants' feeling comfortable during the interviews is an important issue for focus group interviews (Krueger & Casey, 2000). The researchers took notes during the interviews and attempted to give them an equal right to speak. The researchers paid attention to maintain the interviews on the research topic. These were believed to enhance the quality of focus groups (Yıldırım & Şimşek, 2011). Both of the researchers did the analysis of the data individually, and later on, the developed themes and codes were compared and discussed to reach a consensus. This may enhance the reliability of the data analysis process when each researcher deals with the same data as this kind of coding can help make the definitions clearer (Miles & Huberman, 1994). Direct quotations from teachers' speech are presented to support the themes and codes developed.

## The Role of Researchers

One of the authors of the current research has been working as a classroom teacher at a multi-grade school governed by the Ministry of National Education. He deals with administrative issues at his school as well as teaching in the classroom; he has experience in teaching-learning processes at multi-grade schools. The other researcher has published research using qualitative research methods and is interested in the experiences of teachers of multi-grade classes. The congruence of researchers' past experiences, education, research interests, and the research topic is important to enhance the credibility of the research (Shipman, 2015). In the present research, the researchers attempted to assure such a congruence.

# Findings

Three main themes emerged in the data analysis with regards to educational challenges faced in pre-and peri-pandemic periods. These were: challenges faced in normal times, challenges faced in face-to-face education in the pandemic, and challenges faced in distance education in the pandemic. Each theme and related codes are presented under different sections.

## **Challenges Faced in Normal Times**

The challenges faced in multi-grade classes before the pandemic was the first theme constructed. 5 sub-themes addressing specific challenges in different aspects were categorized under this main theme.

Teachers faced several challenges on different issues before the pandemic, in the normal times. Among these challenges were infrastructural challenges which refer to fundamental physical and organizational structures. The most accentuated challenges were frequent electric power and water outages, and inadequate physical structures. Sewer blockages and heating problems were also reported as the challenges of multi-grade schools and classes. Teachers believed that these challenges affected teaching-learning processes negatively because teachers made efforts to overcome these challenges. Regarding power outages and water shortage, Asaf commented: "The physical structure of the school is really bad. There are electric power outages. When there is electric, we face water shortage." (19/12/2020). Ali opined that:

Burning stove for heating is a problem in itself. It takes away teachers' time for activities in the lessons. I write a question on the board and go to check whether the stove is burned. There is nothing to do, we need to warm up, children will be sick there. (09/12/2020).

The systemic challenges were mostly related to not getting enough support from the district authority responsible for education in terms of providing the required materials. Teachers argued that the district authority was not interested in the challenges they encountered. As a result, teachers had to spend money for supplying these materials. Another stressed issue was related to security; some teachers opined that required cautions were not taken. Lastly, salaries were an issue teachers complained about. Teacher views about these challenges were as follows:

We obtain the materials ourselves. It is a ruler, a sphere, or a block, we take them all ourselves. This is how we teach the lessons. There were none of them at my school either. It has been three years already since I came to this school, I bought them all myself. I provided some of them with assistance and I bought some of them by paying from my pocket. (Asu, 09/12/2020)

My problem is about the functioning of the district authority for national education. We are going (to get help) but I think we are not as interested as the principal of a big school. For example, the difficulties of principals in other big schools are taken into consideration. I noticed that. (Eymen, 19/12/2020)

I don't think I have the safety of life. Last year it was not that much, but with the closure of middle schools in the new period, middle school students are constantly coming to my school to play games. I do not get along with the older children. They do constantly give harm and are noisy. Although I warn them nicely, I see very different reactions. I have a lot of problems; they throw stones at school and come to school with a knife. I've experienced much worse things. (Seda, 19/12/2020)

Educational challenges cover diverse issues regarding the curricula, textbooks, learning outcomes, teaching, and students. Teachers stated that the books and curricula are not suitable for multi-grade classes. Eda commented: "The curricula, the textbooks, and resources provided are not suitable for multi-grade classes. Lessons other than Mathematics and Turkish are taught somehow. However, the learning outcomes in Mathematics and Turkish for the 4th grade cannot be attained. Sometimes, we attempt to offer the learning outcomes of the first grade in the second grade..." (09/12/2020)Eymen stated: "I have been here for two years, but I could never implement the curriculum provided by the MoNE. It is an intensive curriculum. It is too comprehensive for broad for multi-grade classes. In the first year, I was only able to teach the four math operations, I could not start to teach the subject of fractions..." (19/12/2020)Some challenges were faced due to students' lack of readiness and not knowing Turkish. Seda noted that:

Each student's readiness was different from others. I would divide the board (by drawing via a marker). I could never teach in a teacher-homework-based mode. There were seven students and seven letters. I would teach seven different letters in the same lesson to different students. (19/12/2020)

Another group of challenges was related to families and parental attitudes. Parents' lack of interest in education, namely parental indifference, crowding of the family, poverty, seasonal working, and conflict among siblings were the most underscored issues. Ali complained about parents' indifference:

Fathers go to the district center very rarely, not for their children, but themselves. Parents are very indifferent. Some send their children with slippers when raining. They do not say they cannot buy a coat for them due to poverty, they do not buy or could not afford to buy. (09/12/2020)

The children come to school in November because they work as seasonal workers, they go again by March. In this way, when they come back to school, they forget everything they've learned. (Asaf, 19/12/2020)

The last challenges were contextual ones which are most peculiar to the conditions of rural settings. The most highlighted problem was transportation and undertaking responsibilities not related to teaching. Teachers stated that their schools were far from their homes, and this caused problems for them on a daily routine. Eda explained that:

Last year, our bus service was not passing near the school. I would get off on the road and continue the remaining road with a parent's car. I would pay him too. I would get tired, become late and pay a lot. We were tired even before starting to teach. These negative issues lower one's motivation naturally. (09/12/2020)

#### Challenges Faced in Distance Education During the Pandemic

Based on teachers' views and hands-on experiences, it was revealed that challenges faced in distance education during the pandemic were categorized under 5 themes. The root reasons behind the challenges faced were rather similar to those experienced before the pandemic. The challenges were infrastructural, family-related, distance education-related, and process-related. The infrastructural challenges were the lack of internet infrastructure and the insufficiency of the network. Teachers reported that these technical challenges made the distance education process ineffective. Ali noted that: "For us to teach via live lessons, the Internet is needed. In this village, the network is insufficient. My own telephone's network is also insufficient. No one can reach me in the village." (09/12/2020) Seda similarly stated that: "We could not do any synchronous live lessons during the distance education process in March as the opportunities are lacking. There is no internet in the village." (19/12/2020)

Family-related challenges came to the fore during the pandemic. These challenges were: the lack of parental support, lack of technological tools, having many children, lack of digital awareness, and inability to provide a learning environment for synchronous live courses. The socio-economic features of the families living in villages seem to have affected teaching-learning processes. One teacher (Ali) commented: "The biggest problem in synchronous lessons is that we do the lessons together with the families. We sit down like in a congregation, they are in their homes, and I am in my home. As you know, there are single rooms in a typical house. The kitchen is a room in some houses. In some houses, the voices of children, crying of a baby come from the back. Sometimes a younger sibling wants to attend the lesson. We are trying to do the lessons one way and another." (09/12/2020)

Distance education-related challenges were specific problems such as inability to concretize the materials used, inability to get quality feedback from students, students' not following the instructions, difficulty to teach a new subject, inability to teach some lessons, lagging behind the curriculum, and inappropriateness of the learning outcomes provided on the EBA TV. For the problem of inability to concretize the materials used, Asu stated that: "It becomes sometimes hard to concretize the materials while teaching on WhatsApp. We try to use the materials we have developed, but it is not very effective." (09/12/2020)

Eda expressed that: "Although we share the textbook on the screen, students cannot find the instructions. When I say the fifth question, they say "which fifth question?" The problem gets greater when the grade level decreases. I cannot say a first grader to open the  $60^{\text{th}}$  page of the book." (09/12/2020)

### Challenges Faced in Face-to-Face Education During the Pandemic

Apart from the challenges faced during the distance education process, there were several challenges encountered in face-to-face education provided during the pandemic. The findings revealed that teachers faced challenges regarding obeying hygiene rules, social distancing, teaching under pandemic conditions, the nature of the pandemic, and procedures of teacher work. Under this theme, the main challenges were related to hygiene and social distancing, and student attitudes. Teachers believed that it was hard to ensure social distancing in the classroom and breaks. Water outages prevented students from cleaning their hands. The problem of water outages was faced before the pandemic, and it affected ensuring hygiene during the face-to-face education. Some teachers complained about students' unwillingness to wear face masks in the classroom and breaks and use disinfectant. Concerning these challenges, Seda noted that: "Students do not obey social distancing anyway. They cannot obey because the classroom is small. I have 20 students, how can they ensure this? We cannot ensure classroom order. We cannot make students sit in distance; we do not have enough desks." (19/12/2020)

Some issues regarding teaching under pandemic conditions made it hard for teachers to work effectively. To begin with, few teachers found it hard to teach effectively in social distancing. Teaching letters while wearing face masks was another challenge. Managing classrooms under pandemic conditions was found to be challenging as well. Some challenges rose from the nature of the pandemic and its negative effects on students. Teachers argued that students participated in the courses less than before, and their interest in the courses decreased. They believed that the pandemic deteriorated students' psychology and weakened their social skills. Another important issue was that infected students under quarantine could not attend the lessons. These findings indicate the overall negative effects of the pandemic on students in multi-grade classes. The last theme was about the procedures of teacher work. Regarding this theme, it was unearthed that teachers' workload increased due to the pandemic. Some teachers did not believe in some educational activities done during the pandemic asserting them to be a formality and not effective.

#### **Discussion, Conclusion, and Implications**

The most significant challenges that teachers encountered in the pre-pandemic (normal times) were infrastructural challenges including frequent electric power and water outages and inadequate physical structures such as sewer blockages and heating problems. The lack of support provided by district authorities of education which refers to both financial and material support and social support was an issue that teachers considered to affect teaching-learning processes negatively. Security of teachers and teacher salaries were also deemed to be problematic although the issue of teacher salaries is not peculiar to teachers of multi-grade classes. These were named systemic challenges. Furthermore, some issues related to educational resources, curricula, teaching, and students constructed challenges. A specific focus was on the unsuitability of textbooks and curricula for multi-grade classes. These problems mostly arise due to the organization of national education systems in a monograded norm (Pridmore, 2007). The nature of multi-grade classes,

namely having students from different grades in the same classroom, makes it hard for teachers to perform better. In these classes, students' readiness levels were noted to be highly divergent, accompanied by a language problem in some cases. Some challenges were seen to be related to family characteristics and attitudes. The low socio-economic status of families affected their involvement in and support for education. Having many children, poverty, seasonal work, and infamily conflicts set challenges about teaching and learning. Most of these challenges were revealed in previous research as well (see Atalay & Anagün, 2014; Ay & Aydoğdu, 2016).

Teachers complained a lot about parents' indifference. In addition, some contextual challenges including transportation and undertaking non-role duties/responsibilities affected teachinglearning processes as teachers suggested. Consistent with these findings, previous research has revealed that there are many challenges faced in multi-grade schooling. For example, in the studies by Karayel (2017) and Kaya and Taşdemirci (2005), parents' indifference was found to be a significant problem in multi-grade schools. In a similar vein, Aksoy (2008a) revealed that teachers were not able to get sufficient support from parents to solve problems about students and schools. In the current study, support from the district authorities of education was considered to be insufficient too. The lack of financial support was revealed in different studies (see Aksoy, 2008b; Summak, Summak, & Gelebek, 2011; Şahin, 2003). Insufficient physical capacity (Abay, 2006; Temizyürek, 2019) and a poor working environment (Yerlikaya, 2000) were found to be among the problems too. The textbooks were found unsuitable for multi-grade schools in the current study, consistent with the results of the Mulryan-Kyne (2004) study. Taken together, it may be argued that teachers suffered from many challenges in the educational process before the pandemic and that these challenges mostly affected their experiences during the pandemic. In their study on the effects of the pandemic on teachers, Eşici, Ayaz, Yetim, Çağlar, and Bedir (2021) revealed that teachers were both positively and negatively affected by the pandemic and that teachers needed psychological support, support for in-service training and infrastructure.

The findings revealed that classroom teachers encountered different challenges during distance education in the pandemic period. These challenges were infrastructural, family-related, distance education-related, and process-related. Infrastructural challenges which refer to technical issues concerning physical and organizational structures were related to the lack of internet infrastructure and the insufficiency of the network. These challenges decreased the effectiveness of distance education as teachers suggested. In the Arslan and Şumuer (2020) study, it was reported that teachers experienced challenges during the teaching in online classes due to some reasons stemming from students, lack of resources, time constraints, and contextual issues. Similar challenges were revealed in the research by Leech, Gullett, Cummings, and Haug (2020).

The parental attitudes and the socio-economic status of families also caused some challenges in terms of providing support, technological tools, and an appropriate learning environment for students' learning. Families had many children, which made their contribution and involvement rather limited, apart from the lack of digital awareness, based on teachers' experiences and perspectives. These findings are consistent with those of Erbaş's (2021) study on the challenges of teaching literacy in the first grade, in which parents' indifference, technological problems, socio-economic challenges, and the lack of effective communication with students were found to make teachers' job harder. Teachers also had difficulties in using materials effectively as students mostly attended the courses via WhatsApp, and therefore, the materials did not address their senses. They could not get feedback from students. Teachers were unable to teach new subjects

and some lessons, which was followed by lagging behind the curriculum. Educational outcomes provided on the EBA TV were regarded as inappropriate by teachers. Can (2020) argues that the distance education system should be strengthened in terms of infrastructure and access. In the study by Sönmez et al. (2020), it was found that classroom teachers believed that the appropriateness of the content on the EBA TV decreased from central schools to rural schools.

In face-to-face education during the pandemic, teachers had challenges about social distancing. Students did not obey the rules related to the pandemic both in classes and breaks. One main reason behind this challenge was linked with class size by teachers. Having small classes set barriers for ensuring social distancing. As for teachers' work, it was observed that novel challenges were experienced due to the pandemic and new normal education processes. Teachers argued that they had problems in teaching letters (literacy) to students while wearing masks. Social distancing lowered social interaction in the classroom, therefore some teachers stated that they were unable to teach effectively. This new process caused an increase in paperwork for teachers since some of these teachers were holding administrative duties.

It was concluded in this study that the challenges that classroom teachers of multi-grade classes encountered are multi-faceted rather than unidimensional. New challenges were observed to have come out with the pandemic. Before the pandemic, several challenges were stemming from different sources including infrastructural inadequacies, systemic issues, the lack of parental support, the inappropriateness of the curriculum and textbooks, and structural challenges of multigrade schools. The pandemic caused novel challenges such as problems related to hygiene, difficulty in following social distancing rules, students' limited access to distance education, and psychological effects of the pandemic. The pandemic added new challenges to pre-existing challenges faced in multi-grade schools. Attempting to adapt to the new challenges deepened the existing problems, and this both increased teachers' workload, lowered their job performance and decreased the effectiveness of the teaching-learning processes. Multi-grade schools were disadvantaged when compared with the central schools in the pre-pandemic period, and the pandemic has worsened the conditions multi-grade schools are run in. Teachers complained about the lack of support from parents and upper echelons of the district officials both before and during the pandemic periods. These schools were expected to be supported more in the pandemic period; however, this was not the case as the teachers accentuated. The results overall imply the importance of providing more support for multi-grade schools. Support systems need to be built for multi-grade schools due to their peculiar organization. These schools may be prioritized in the normalization process, first of all, by strengthening the infrastructure, providing financial aids allocated for instructional materials, and empowering teachers through building their resilience.

Further research should focus on the effects of the pandemic on teachers and students in multigrade schools from a multidimensional perspective to reveal the adversities that the pandemic has caused. Consistently, how student learning and achievement have been affected by the pandemic requires future investigation. Due to the difficulties faced during the pandemic, teachers were unable to teach effectively and students could not participate in distance education due to the lack of technological means, which may have caused learning losses. Learning losses and how to take action to compensate for these losses should also be examined in detail since classroom teachers of multi-grade classes would have to deal with diverse challenges regarding student learning and behaviors in the post-pandemic period. Continuing previous implementations in the post-pandemic period would do more harm than good. The results of this study should be considered in light of some limitations. Firstly, only nine classroom teachers of multi-grade classes participated in the study. Therefore, the results cannot be generalized. The data were collected through interviews held online, thus data triangulation was not possible. The results can be tested by using different research methodologies, i.e. quantitative and mixed. The experiences of classroom teachers in multi-grade schools in different regions of Turkey and the world can be investigated to obtain comprehensive results.

#### References

- Abay, S. (2006). Birleştirilmiş sınıf uygulamasında öğretmenlerin öğrenme-öğretme sürecinde karşılaştıkları sorunlar [Yayımlanmamış Yüksek Lisans Tezi]. Atatürk Üniversitesi.
- Abay, S. (2007). Birleştirilmiş sınıflarda sosyal bilgiler öğretimindeki sorunlar [Yayımlanmamış Yüksek Lisans Tezi]. On Dokuz Mayıs Üniversitesi.
- Aikman, S., & Pridmore, P. (2001). Multigrade schooling in 'remote' areas of Vietnam. International Journal of Educational Development, 21(6), 521-536.
- Akdağ, A. (2014). Birleştirilmiş sınıflı okullarda çalışan müdür yetkili öğretmenlerin tükenmişlik düzeylerinin incelenmesi (Adıyaman ili örneği) [Yayımlanmamış Yüksek Lisans Tezi]. Türk Hava Kurumu Üniversitesi.
- Aksoy, N. (2008a). Birleştirilmiş sınıflarda eğitim-öğretim: Genç ve deneyimsiz öğretmenlerin görüşlerine dayalı bir araştırma. Eğitim Bilim Toplum Dergisi, 6(21), 83-108.
- Aksoy, N. (2008b). Multigrade schooling in Turkey: An overview. International Journal of Educational Development, 28(2), 218-228.
- Anadolu Ajansı. (2020). Uzaktan eğitim 19 haziran Cuma gününe kadar devam edecek. https://www.aa.com.tr/tr/egitim/meb-uzaktan-egitim-19-haziran-cuma-gunune-kadar-devamedecek/1845523, web adresinden 7 Aralık 2020 tarihinde alınmıştır.
- Archibald, M. M., Ambagtsheer, R. C., Casey, M. G., & Lawless, M. (2019). Using Zoom videoconferencing for qualitative data collection: perceptions and experiences of researchers and participants. International Journal of Qualitative Methods, 18, 1609406919874596.
- Arslan, Y., & Şumuer, E. (2020). Covid-19 döneminde sanal sınıflarda öğretmenlerin karşılaştıkları sınıf yönetimi sorunları. Milli Eğitim Dergisi, 49(1), 201-230. doi: 10.37669/milliegitim.791453
- Atalay, N., & Anagün, Ş. S. (2014). Kırsal alanlarda görev yapan sınıf öğretmenlerinin bilgi ve iletişim teknolojilerinin kullanımına ilişkin görüşleri. Eğitimde Nitel Araştırmalar Dergisi-Journal of Qualitative Research in Education, 2(3), 9-27. doi:10.14689/issn.2148-2624.1.2c3s1m
- Ay, T. S., & Aydoğdu, B. (2016). Sınıf öğretmenlerinin aile katılımına yönelik görüşleri. Adıyaman Üniversitesi Sosyal Bilimler Enstitüsü Dergisi, 8(23), 562-590.
- Can, E., (2020). Coronavirüs (Covid-19) pandemisi ve pedagojik yansımaları: Türkiye'de açık ve uzaktan eğitim uygulamaları. Açıköğretim Uygulamaları ve Araştırmaları Dergisi, 6(2), 11-53.
- Çiçek, İ., Tanhan, A., & Tanrıverdi, S. (2020). Covid-19 ve eğitim. Milli Eğitim Dergisi, Salgın Sürecinde Türkiye'de ve Dünyada Eğitim Özel Sayısı, 49(1), 1091-1104.
- Çiftçi, Ş. K., & Cin, F. M. (2018). What matters for rural teachers and communities? Educational challenges in rural Turkey. Compare: A Journal of Comparative and International Education, 48(5), 686-701.
- Cornish, L. (2006). Parents' views of composite classes in an Australian primary school. The Australian Educational Researcher, 33(2), 123-142.
- Creswell, J. W. (2016). Nitel araştırma yöntemleri: Beş yaklaşıma göre nitel araştırma ve araştırma deseni. Siyasal Kitabevi.
- Dal, A. (2004). Birleştirilmiş sınıflı köy ilköğretim okullarında görevli müdür yetkili öğretmenlerin stres kaynakları [Yayımlanmamış Yüksek Lisans Tezi]. İnönü Üniversitesi.
- Duban, N., & Şen, F.G. (2020). Sınıf öğretmeni adaylarının COVID-19 pandemi sürecine ilişkin görüşleri. Electronic Turkish Studies, 15(4), 357-376.
- Erbaş, Y. H. (2021). Covid-19 salgını döneminde eğitim: İlkokuma yazma öğretiminde karşılaşılan sorunlar ve çözüm önerileri. Ana Dili Eğitimi Dergisi, 9(2), 360-380. doi:10.16916/aded.851724
- Erdem, A., Kamacı, S., & Aydemir, T. (2005). Birleştirilmiş sınıfları okutan sınıf öğretmenlerinin karşılaştıkları sorunlar: Denizli örneği. Eğitimde Kuram ve Uygulama, 1(1-2), 3-13.
- Eriş, M., Arıcan, K., & Göksoy, S. (2015). Birleştirilmiş sınıflı ilkokullarda görevli öğretmenlerin stres düzeyleri. Asya Öğretim Dergisi (Asian Journal of Instruction), 3(1), 92-106.

- Eşici, H., Ayaz, A., Yetim, D., Çağlar, S., Bedir, N. (2021). Teachers in COVID-19 period: Psychological effects, practices and career needs. Turkish Journal of Education, 10(2), 157-177. doi:10.19128/turje.855185
- Hargreaves, E., Montero, C., Chau, N., Sibli, M., & Thanh, T. (2001). Multigrade teaching in Peru, Sri Lanka and Vietnam: an overview. International Journal of Educational Development, 21(6), 499- 520
- İlter, İ. (2015). Sınıf öğretmeni adaylarının birleştirilmiş sınıf kavramına ilişkin metaforları. Elementary Education Online, 14(4), 1450-1468.
- İnce, N. B., & Şahin, A. E. (2016). Birleştirilmiş ve bağımsız sınıflarda çalışan sınıf öğretmenlerinin mesleki doyum ve tükenmişlik düzeylerinin karşılaştırılması. Hacettepe Üniversitesi Eğitim Fakültesi Dergisi, 31(2), 391-409.
- Kantos, Z. E. (2020). Sınıf öğretmenlerinin uzaktan eğitim ile ilgili düşünceleri. 8. Uluslararası Bilimsel Araştırmalar Kongresi-Sosyal ve Eğitim Bilimleri, 67-81.
- Karahan, E., Bozan, M. A., & Akçay, A. O. (2020). Sınıf öğretmenliği lisans öğrencilerinin pandemi sürecindeki çevrim içi öğrenme deneyimlerinin incelenmesi. Electronic Turkish Studies, 15(4), 201-214.
- Karayel, E. (2017). Birleştirilmiş sınıf uygulaması olan ilkokullarda görevli öğretmenlerin yaşadığı sorunlar. Uluslararası Liderlik Eğitimi Dergisi, 1(1), 26-39.
- Kaya, K., & Taşdemirci, E. (2005). Birleştirilmiş sınıflar ile bağımsız sınıflarda ilk okuma yazma öğretiminde karşılaşılan sorunların karşılaştırmalı incelenmesi. Erciyes Üniversitesi Sosyal Bilimler Enstitüsü Dergisi, 19(2), 1-26.
- KODA (Köy Okulları Değişim Ağı), (2018). Köy Okulları Değişim Ağı 2018-2019 Faaliyet Raporu. https://www.koda.org.tr/static/2018\_2019\_faaliyet\_raporu.pdf, web adresinden 13 Aralık 2020 tarihinde alınmıştır.
- Krueger, R. A., & Casey, M. A. (2000). Focus groups: A practical guide for applied research. Thousand Oaks, CA: SAGE Publications.
- Leech, N. L., Gullett, S., Cummings, M. H., & Haug, C. A. (2020). Challenges of remote teaching for k-12 teachers during Covid-19. Journal of Educational Leadership in Action, 7(1), https://www.lindenwood.edu/academics/beyond-the-classroom/publications/journal-of-educationalleadership-in-action/all-issues/volume-7-issue-1/challenges-of-remote-teaching-for-k-12-teachers-duringcovid-19/
- Lobe, B., Morgan, D., & Hoffman, K. A. (2020). Qualitative data collection in an era of social distancing. International Journal of Qualitative Methods, 19, 160940692093787. https://doi.org/10.1177/1609406920937875
- Lu, R., Zhao, X., Li, J., Niu P, Yang, B., Wu, H. et al., (2020). Genomic characterization and epidemiology of 2019 novel coronavirus: Implications for virus origins and receptor binding. The Lancet, 395(10224), 565-574. https://doi.org/10.1016/S0140-6736(20)30251-8.
- Matthews, B., & Ross, L. (2010). Research methods: A practical guide for the social sciences. Harlow: Longman.
- McEwan, P. J. (2008). Evaluating multigrade school reform in Latin America. Comparative Education, 44(4), 465-483. doi:10.1080/03050060802481504
- Miles, M. B., & Huberman, A. M. (1994). An expanded sourcebook: Qualitative data analysis. Thousand Oaks, CA: SAGE Publications.
- MoNE [Milli Eğitim Bakanlığı]. (2020a). Bakan Selçuk, Koronavirüs'e karşı eğitim alanında alınan tedbirleri açıkladı. http://www.meb.gov.tr/bakan-selcuk-koronaviruse-karsi-egitim-alanında-alinan-tedbirleri-acikladi/haber/20497/tr, web adresinden 7 Aralık 2020 tarihinde alınmıştır.
- MoNE [Milli Eğitim Bakanlığı]. (2020b). Bakan Selçuk, 21 Eylül'de başlayacak yüz yüze eğitimi canlı yayında anlattı. http://www.meb.gov.tr/bakan-selcuk-21-eylulde-baslayacak-yuz-yuze-egitimi-canli-yayında-anlatti/haber/21650/tr, web adresinden 13 Aralık 2020 tarihinde alınmıştır.
- MoNE [Milli Eğitim Bakanlığı]. (2020c). Yüz yüze eğitim, anasınıfı ve ilkokul 1. sınıflarda başladı. https://www.meb.gov.tr/yuz-yuze-egitim-anasinifi-ve-ilkokul-1inci-siniflarda-basladi/haber/21672/tr, web adresinden 18/12/2020 tarihinde alınmıştır.
- MoNE [Milli Eğitim Bakanlığı]. (2020d). Okullarda yüz yüze eğitimde ikinci aşama 12 ekim pazartesi günü başlıyor. https://www.meb.gov.tr/okullarda-yuz-yuze-egitimde-ikinci-asama-12-ekim-pazartesi-gunu-basliyor/haber/21776/tr, web adresinden 18/12/2020 tarihinde alınmıştır.
- MoNE [Milli Eğitim Bakanlığı]. (2020e). Uzaktan eğitim sürecinin detayları. https://www.meb.gov.tr/uzaktanegitim-surecinin-detaylari/haber/21990/tr, web adresinden 18/12/2020 tarihinde alınmıştır.
- Msimanga, M. R. (2020). Teaching and learning in multi-grade classrooms: the LEPO framework. Africa Education Review, 17(3), 123-141.

- Mulryan-Kyne, C. (2004). Teaching and learning in multigrade classrooms: What teachers say. The Irish Journal of Education, 35, 5-19.
- Naparan, G. B., & Alinsug, V. G. (2021). Classroom strategies of multigrade teachers. Social Sciences & Humanities Open, 3(1), 100109.
- Özdemir, M., Özdemir, O., & Gül, M. (2020). Palavan, Ö., & Göçer, V. (2017). Sınıf öğretmenlerinin birleştirilmiş sınıflarda karşılaştıkları problemler (Malatya il örneği). Kırıkkale Üniversitesi Sosyal Bilimler Dergisi, 7(2), 69-96.
- Pridmore, P. (2007). Adapting the primary-school curriculum for multigrade classes in developing countries: A fivestep plan and an agenda for change. Journal of Curriculum Studies, 39(5), 559-576.
- Quail, A., & Smyth, E. (2014). Multigrade teaching and age composition of the class: The influence on academic and social outcomes among students. Teaching and Teacher Education, 43, 80-90. https://doi.org/10.1016/j.tate.2014.06.004
- Şahin, A. E. (2003). Birleştirilmiş sınıflar uygulamasına ilişkin öğretmen görüşleri. Hacettepe Üniversitesi Eğitim Fakültesi Dergisi, 25(25), 166-175.
- Samancı, O., Ocakcı, E., & Ocakcı, S. (2016). Birleştirilmiş sınıflarda iyi örnek uygulamaları. Akademik Sosyal Araştırmalar Dergisi, 4(34), 58-72.
- Şekerci, K. (2015). Birleştirilmiş sınıflarda görevli öğretmenlerin tükenmişlik düzeylerinin incelenmesi; Şanlıurfa il örneği [Yayımlanmamış Yüksek Lisans Tezi]. Kahramanmaraş Sütçü İmam Üniversitesi.
- Shareefa, M. (2021). Using differentiated instruction in multigrade classes: A case of a small school. Asia Pacific Journal of Education, 41(1), 167-181.
- Shipman, S. D. (2015). The role of self-awareness in developing global competence: A qualitative multi-case study. Graduate Theses, Dissertations, and Capstones. Paper 21. https://scholarworks.bellarmine.edu/tdc/21
- Sönmez, M., Yıldırım, K., & Çetinkaya, F. Ç. (2020). Yeni tip koronavirüs (SARS-CoV2) salgınına bağlı uzaktan eğitim sürecinin sınıf öğretmenlerinin görüşleriyle değerlendirilmesi. Electronic Turkish Studies, 15(6), 855-875.
- Summak, S., Summak, A., & Gelebek, M. (2011). Birleştirilmiş sınıflarda karşılaşılan sorunlar ve öğretmenlerin bakış açısından olası çözüm önerileri (Kilis ili örneği). Gaziantep Üniversitesi Sosyal Bilimler Dergisi, 10(3), 1221 -1238.
- Taşkaya, S. M., Turhan, M., & Yetkin, R. (2015). Kırsal kesimde görev yapan sınıf öğretmenlerinin sorunları (Ağrı ili örneği). Uluslararası Avrasya Sosyal Bilimler Dergisi, 6(18), 198-210.
- Temizyürek, S. (2019). Birleştirilmiş sınıfta görev yapan öğretmenlerin karşılaştıkları sorunların incelenmesi (Kayseri ili örneği) [Yayımlanmamış Yüksek Lisans Tezi]. Erciyes Üniversitesi.
- Viner, R., Russell, S. J, Croker, H., Packer, J., Ward, J., Stansfield, C., ... Booy, R. (2020). School closure and management practices during coronavirus outbreaks including COVID-19: A rapid systematic review. The Lancet Child & Adolescent Health, 4, 397-404.
- WHO. (2020a). WHO Director-General's opening remarks at the mission briefing on COVID-19 12 March 2020. https://www.who.int/director-general/speeches/detail/who-director-general-s-opening-remarks-at-themission-briefing-on-covid-19---12-march-2020, web adresinden 7 Aralık 2020 tarihinde alınmıştır.
- Yerlikaya, A. (2000). Köy ve şehirlerde çalışan sınıf öğretmenlerinde tükenmişlik düzeylerinin incelenmesi. Yayımlanmamış Yüksek Lisans Tezi. Ankara Üniversitesi.
- Yıldırım, A., & Şimşek, H. (2011). Sosyal bilimlerde nitel araştırma yöntemleri. Ankara: Seçkin Yayıncılık.
- Yılmaz, K. (2013). Comparison of quantitative and qualitative research traditions: Epistemological, theoretical, and methodological differences. European Journal of Education, 48(2), 311-325.
- Yolcu, H. H. (2020). Sınıf öğretmeni adaylarının uzaktan eğitim deneyimleri. Açıköğretim Uygulamaları ve Araştırmaları Dergisi, 6(4), 237-250.
- Yurtbakan, E., & Akyıldız, S. (2020). Sınıf öğretmenleri, ilkokul öğrencileri ve ebeveynlerin Covid-19 izolasyon döneminde uygulanan uzaktan eğitim faaliyetleri hakkındaki görüşleri. Electronic Turkish Studies, 15(6), 949-977.