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Cross-cultural Examination of Early Childhood and Elementary Teachers' Practices During Emergency Online Instruction

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This research aimed to study the experiences of early childhood and elementary teachers in the U.S. and Turkiye as they transitioned to different modes of instruction during COVID-19 school closings. The researchers focused on the modes of teaching, support the teachers received, assessment, meeting the needs of students with special needs, and parental involvement. The researchers used a semi-structured survey instrument. Ninety-eight early childhood and early elementary teachers from Turkiye and 155 counterparts from Northeastern U.S. responded to the survey. Results showed that teachers in the U.S. and Turkiye had similar experiences in all the focus areas. These results bring to light areas in which the teachers need assistance to be better prepared for such transitions in the future.

Keywords: Early childhood education, Elementary Education, online remote learning, pandemic, COVID-19, teachers' experiences

INTRODUCTION

The global COVID-19 crisis has transformed and challenged teachers' knowledge, skills, and dispositions since the beginning of 2020. Many abruptly transitioned to a non-face-to-face teaching situation with no time to prepare for their jobs effectively. Education communities around the world responded in different ways depending on the severity of the COVID-19 spread and the available educational resources (Brooks et al., 2020; Reich et al., 2020). Teachers at all levels had to be creative to help their students learn through online education software and hardware while simultaneously learning skills to teach through the same mediums (Fagell, 2020). As teachers adapted to teaching the content in new and innovative ways, they also had to be sensitive to unprecedented home-related factors that affected the students' learning performance (Brooks et al., 2020). As a result, teachers felt the burden of helping their students stay connected to school and develop creative teaching strategies to keep them challenged and engaged. Teachers also had to deal with the impact of COVID-19 in their own homes and take care of their mental health and that of the students and families. Even though COVID-19-related emergencies have been lifted in the past year and daily life started to return to normalcy in both countries, the lessons learned from education under the shadow of the pandemic could help us adjust educational environments accordingly in a moment of any public crisis. This study explored and compared early childhood and elementary teachers' experiences in the U.S. and Turkiye as they transitioned to teaching in different modes of instruction during COVID-19 school closings.

RESEARCH LITERATURE

The emergency transition to online remote education due to the COVID-19 pandemic motivated researchers worldwide to study this situation's impact on different aspects of education. Many studies have examined the impact of emergency remote education on students, teachers, and families across different countries. Gudmundsdottir and Hathaway (2021) reported that Norwegian and U.S. teachers needed more skills and experience to teach online, yet they demonstrated resilience to learn new technologies to tackle this challenge. Teachers in the U.K. felt the need to be more adequately prepared to teach online (Trust & Whalen, 2021). Chinese (Zhang et al., 2020), Indonesian (Atmojo & Nugroho, 2020); Swedish (Bergdahl & Nouri, 2020), Philippino (Alea, Fabrea, et al., 2020) and Turkish teachers (Akkaş et al., 2020; Çakır et al., 2020; Demir, & Kale, 2020) reported lack of professional readiness that was intensified with inadequate infrastructure to support online learning, lack of technical support and professional development opportunities, challenges related to communication with parents, and learning problems experienced by young students.

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One of the most significant issues that emerged during the sudden shift to online remote education was the digital divide between students from different economic levels (Cullinane & Montacute, 2021; Fernandez et al., 2022). Jalongo (2021) examined educational studies on the pandemic's impact on families. She indicated that access to high-quality internet and technological devices was scarce for many students living in rural and urban low-income areas and high-poverty inner-city neighborhoods. Other challenging factors in children's home environment instigated the inequities experienced in emergency remote education. Adults' complicated work schedules and lack of time and attention to help children with online schooling were among those factors (Brooks et al., 2020; Jones, 2020). According to Jalongo's report (2021), families' "quality of life and wellness" declined significantly due to the pandemic-related stressors. Lack of health care, increasing responsibilities at home and work, exhaustion, and lack of human connection caused increased anxiety and physical and mental health problems for all family members. The widening socio-economic divide between middle-upper-income and lower-income families became more explicit due to lay-offs, business closing, and childcare, leaving young children vulnerable to any stress the adults may go through.

The sudden transition to online remote teaching and learning in many parts of the world caught educators by surprise, and they were unprepared to deal with this new phenomenon. The educational research community immediately responded to the need to understand the impact of this global health crisis on teachers, children, families, and communities. Aslan and others (2023) investigated how U.S. early childhood teachers experienced the transition to emergency online learning and what challenges they faced during such a period. The study revealed that the teachers needed help to compromise hands-on, interactive learning and intimate teacher-child relations due to the limitations of online learning. The lack of material resources in children's home environments increased teachers' concerns about the quality of developmentally appropriate education for young students. Steed and Leech (2021) examined the practices of early childhood teachers and special education teachers when the U.S. schools transitioned to online education. The researchers found that two groups of teachers had similar challenges regarding limitations of online student engagement, lack of resources on the part of students, suitability of online education for very young students, and heavy reliance on families. The study showed that early childhood special education teachers spent more time with students in the virtual environment than grade-level teachers, perhaps due to the necessity of one-on-one interaction with children with special needs. Brion (2022) studied a group of teachers' self-efficacy during emergency online learning in a U.S. middle school. This case study revealed the sudden disequilibrium in the school culture and overall work atmosphere. The principal's lack of skills and experience to manage a crisis such as a pandemic significantly contributed to teachers' low self-efficacy, low morale, and low motivation to teach. Furthermore, ineffective feedback from admins, racial clicks that blocked collaboration and communication between teacher groups, and top-down decision-making were other factors exacerbating the situation.

Studies conducted in different geographical, cultural, and educational contexts presented similar results. Yıldız et al. (2023) researched different Turkish stakeholders' (e.g., admins, ECE teachers, and parents) perceptions of their roles during emergency online remote learning. Interviews with participants from these three groups revealed that teachers' perceived roles as "supporters" and caretakers became conflicting because the social-emotional connection with their young students was severely limited. Teachers believe that online education must be developmentally appropriate for young children. Yazıcı and Yüksel (2022) examined the developmental (e.g., social-emotional, linguistic/communication, cognitive, physical) impact of pandemic-related restrictions on Turkish children, teachers, and parents. Parents reported that lack of in-person interaction with peers (e.g., play) and others, as well as limited outside time, arrested their children's socialization. Children became more reserved, introverted, and impulsive in some cases.

As demonstrated, the educational research literature is rich with studies exploring and presenting the impact of COVID-19-related life changes on teachers, children, and communities. This exploratory study aims to contribute to the existing research base by expanding the scope of COVID-19 from a single geographic perspective to cross-geo-cultural contexts (American and Turkish) and to explore teachers' experiences in two countries (The U.S. and Turkiye). We desire to contribute to our understanding of early childhood education and early elementary teachers' teaching experience worldwide during online remote learning due to COVID-19 school closures. In the current study, we aim to explore and compare early

childhood and elementary teachers' experiences in the U.S. and Turkiye as they transitioned to teaching in different modes of instruction during COVID-19 school closings.

Context of the Study

We chose pre-kindergarten to 3rd-grade teachers as our target group because the mixture of early childhood and primary grade teachers teaches this range of grades in the U.S. and Turkiye. Researchers from the U.S. (first and second authors) and Turkiye (third author) collaborated and identified the school regions in their respective countries. This collaboration was born from concerns the three researchers shared regarding COVID-19-related school closings in their respective countries. The U.S. segment of the study took place in the context of an inner-city school district located in a Northeastern state in the U.S., whereas the Turkiye segment of the study was conducted with early childhood and early elementary school teachers from the Midwest Anatolia region (Kocaeli, Eskisehir, and Ankara).

When the study was initiated, the U.S. had the highest confirmed cases of COVID-19 (John Hopkins University, Coronavirus Resource Center, 2021). The U.S. school district where the study was conducted stayed in emergency online learning from March 2020 until September 2021. On the other hand, Turkiye had a very sharp incline in its confirmed COVID-19 cases (around 16 million) between March 2020 and January 2022 9 (WHO, 2023). Like their U.S. counterparts, Turkiye's schools stayed in emergency online learning until the start of the 2021-2022 school year.

Research Questions

R.Q.1- What experiences did the U.S. and Turkish teachers have with the teaching mediums used during online remote learning?

R.Q.2- What kind of administrative support did the U.S. and Turkish teachers receive during the online remote learning?

R.Q.3- What experiences did the U.S. and Turkish teachers have with assessing student progress and performance during online remote learning?

R.Q.4- What experiences did the U.S. and Turkish teachers have with accommodating learners with special needs during online remote learning?

R.Q.5- What experiences did the U.S. and Turkish teachers have with parent involvement during online remote learning?

METHOD

The researchers adopted the instrumental case study method to study the patterns in U.S. and Turkish teachers' experiences during online remote learning. According to Stake (2005), the instrumental case study method aids researchers in choosing a specific case to understand relationships and develop a deeper insight into how this specific case deals with the issues at hand. The central phenomenon's context is critical in an instrumental case study (Stake, 2005). The global health crisis is the overarching context affecting almost every country worldwide. The educational community's response to this crisis in both the U.S. and Turkiye was to transition to the online learning environment, which is the context in which we are interested in studying the patterns in early childhood teachers' and early elementary teachers' experiences.

Research Instrument

The researchers chose a survey instrument as a method to collect data. Survey instruments have been historically used to research primarily sociological phenomena. They are proven to be effective in unveiling relationships between different factors impacting a particular population and gaining insight into the opinions of a large sample pool (Creswell & Creswell, 2018; Peer et al., 2012).

The researchers developed a semi-structured survey that was available in dual languages: English and Turkish. The survey questions were carefully crafted to align with the specific themes of each research question. For instance, as researchers and teacher educators, we were interested in exploring the

technological mediums that teachers utilized during the sudden shift to online education. To investigate this, we included a question that asked participants to identify the specific mediums they incorporated into their online teaching practices. Building on this, the subsequent question asked participants to evaluate the effectiveness of the most used mediums globally during the emergency online learning period, which was relevant at the time of the study's initiation. The survey development process was a collaborative effort. The researchers brainstormed to generate potential questions that aligned with the core research questions. After multiple iterations to refine and fine-tune the questions, the final survey instrument was established in English. To ensure cultural and linguistic relevance, the first and third authors, who are fluent in Turkish, translated the survey questions into Turkish, taking into account the specific nuances of the Turkish Education System.

The survey included Likert-type rating questions and open-ended questions. The survey was uploaded on Google Forms software. A secure link for the survey was embedded in the email sent to potential participants. The participants were first asked to review the consent form. If they agreed to participate in the survey, they could proceed to the next page to complete the survey anonymously.

Research Participants

98 early childhood and elementary school teachers from different regions of Turkiye (Kocaeli, Eskisehir, and Ankara) and 155 educators from a Northeast U.S. school district responded to the survey. See Table 1a and b for the participant demographics.

Table 1a. Turkish participants' demographics

Gender	Age	Education	Grade Teaching	Years of teaching	School	Ed. Degree
Female-84.7% (n=83)	20-25- 7.1% (n=7)	B.S. 74.5% (n=73)	Pre-K 21.6% (n=21)	0-5 11.3% (n=11)	Public School 87.5% (n=85)	ECE 37.5% (n=37)
Male-15.3% (n=15)	26-35 34.7% (n=34)	Master's 24.5% (n=24)	K 23.7% (n=23)	6-10 19.6% (n=19)	Private 12.5% (n=12)	ELEM 41.6% (n=40)
	36-45 41% (n=41)	Other 1% (n=1)	1st 21.6% (n=21)	11-15 33% (n=32)		School Counseling 4.16% (n=4)
	46-55 17.3% (n=17)		2nd 21.6% (n=21)	16-20 12.4% (n=12)		Others Degrees* 14.58% (n=16)
	56-up 2% (n=2)		3rd 24.7% (n=24)	21-25 15.5% (n=15)		
				26-up 8.2% (n=8)		
TOTAL: 100% (n= 98)	TOTAL: 100% (n= 98)	TOTAL: 98% (n= 97)**	TOTAL: 98% (n= 97)	TOTAL: 98% (n= 97)	TOTAL: 97% (n=97)	TOTAL: 97% (n=97)

*Chemistry, physics, psychology, German teaching, English teaching, Turkish teaching, special education, global education, agriculture, economy, journalism

**One participant only partially responded to the demographics questions and the rest of the survey.

Table 1b. American participants' demographics

Gender	Age	Education	Ed. Degree	Years of teaching	Grade Teaching	School
F- 94.19% (n=146)	20-25- 1.29% (n=2)	B.S. 37.41% (n=58)	ECE 33.11% (n=51)	6-10 24% (n=37)	Pre-K 60% (n=93)	Public School 96.12% (n=149)
M- 5.16% (n=8)	26-35 25.80% (n=40)	Master's 31.61% (n=49)	ELEM 13.54% (n=21)	16-20 24% (n=37)	K 13.60% (n=21)	Private 3.88% (n=6)
Non-Bi .64% (n=1)	36-45 25.16% (n=39)	B.S. + Ed.Degree 25.80% (n=40)	SPEC 3.87% (n=6)	21-25 18.70% (n=29)	3rd 9% (n=14)	
	46-55 31.61% (n=49)	B.S.+Master's 1.94% (n=3)	Others* 49.35% (n=76)	0-5 16.12% (n=25)	1st 8.44% (n=13)	
	56-up 15.48% (n=24)	B.S.+EdDegree +Master's 1.29% (n=2)		26-up 8.38% (n=13)	2nd 5.84% (n=9)	
	Unid .64% (n=1)	Doctorate 1.94% (n=3)			Mixed age 2.58% (n=4)	

Data Analysis Method

The results of the rating questions were tabulated. Frequencies for ratings of each question were run by utilizing Microsoft Excel's Descriptive Analysis feature. The results of the qualitative questions were coded using Glaser and Straus's (1999) constant comparative method. Patterns across qualitative answers helped identify the emerging themes. These themes also supported the findings from the rating questions. The researchers independently analyzed the qualitative data and achieved 85 % and above intercoder reliability on the analysis of qualitative survey items.

RESULTS

RQ 1- What experiences did the U.S. and Turkish teachers have with the teaching mediums used during online remote learning?

The participants were asked to mark as many mediums of teaching as they adopted during online remote learning (see Table 2). A high percentage of the American participants (80.5%, n=124) adopted ZOOM video conferencing software to teach their classes. American teachers ' other frequently chosen mediums of teaching were Google Classroom, sending lessons and activities to parents via email or text, and finally distributing home learning kits to parents. A large percentage of Turkish teachers reported using ZOOM (87.6%). The Turkish teachers who marked "others" indicated that they used "WhatsApp" application to send and receive homework to and from the students, make audio and video calls, send educational videos and activities, and communicate with the parents.

Participants were asked to rate their familiarity with the medium they adopted as they abruptly transitioned to online remote education (see Table 3). 34% of the U.S. participants were familiar or very familiar with %34 with ZOOM software, whereas only 18.5% of Turkish participants were familiar or very familiar with this tool. Google Classroom was relatively familiar or more familiar to the U.S. teachers (33%) whereas Turkish teachers did not mention this platform much (10.30%) because of the "Eğitim Bilişim Ağı (EBA)" (Education Information Network) learning platform required by the Ministry of Education for all ages.

Table 2. Mediums of teaching used during online learning

*Mediums of teaching during COVID-19 school closings	Turkish teachers (n=97)	American teachers(n=155)
Teaching through ZOOM	87.6%	80.50%
Teaching through EBA**	73.2%	N/A
Watching lessons on State TV	38.1%	2%
Audio or/and video recording of the lessons	34%	27%
Sending lessons/activities and homework to parents' emails/text	29.9 %	54%
Distributing home learning kits to parents	24 %	51%
Putting lessons on an online teaching platform	4.2%	24%
Others	6%	14%

*Participants marked as many as they could.

Table 3. Teachers' familiarity with software and hardware

Items/*Scale	*1(%)		*2(%)		*3(%)		*4(%)		*5(%)	
Soft-hardware	The U.S.	Turk	The U.S.	Turk	The U.S.	Turk	The U.S.	Turk	The U.S.	Turk
ZOOM	39%	44.3%	15%	13.4%	12%	4.1%	17%	9.27%	17%	9.27%
Google Classroom	32%	63.91%	21%	18.55%	14%	6.18%	18%	5.15%	15%	5.15%
Student support learning platform	42%	24.74%	21%	18.55%	14%	10.30%	17%	22.68%	6%	22.68%
Presentation software	23%	11.34%	21%	14.43%	15%	18.55%	21%	27.93%	20%	27.93%

*Scale: 1=Not familiar at all, 2= Not familiar, 3=Somewhat familiar, 4=Familiar, 5=Very familiar

A follow-up qualitative question asked the participants to explain the advantages and disadvantages of the chosen medium. The most significant similarity across participants from both countries regarding the advantages of the medium was that the live meetings helped teachers access their students in real-time and build some interaction, although limited. American and Turkish teachers took full advantage of increasing communication with children and parents on and off live sessions. WhatsApp was the preferred instant communication tool for Turkish teachers, whereas American teachers preferred Class Dojo, which was vested and approved by their school district. A Turkish participant mentioned that "the students were not completely separated from their teachers and peers. As the students became more lonely during this period [school closings], they saw they were not alone." Another common advantage that emerged from the participants' responses was that online learning platforms (e.g., Google Classroom for American teachers

and EBA for Turkish teachers) afforded the teachers the ability to integrate various shared synchronous and asynchronous instructional materials, assignments and communicate with students and parents, just a click away.

Regarding the disadvantages, teachers in both the U.S. and Turkiye experienced challenges from the limitations and problems related to software/hardware used in teachers' and children's homes. For example, Google Meet video conferencing software adopted by some U.S. schools limited teachers' ability to see the cameras of all students at once or remotely mute students' microphones. Turkish teachers mentioned that technological difficulties or lack of adequate technology and internet stream in children's homes often interrupted their instruction and student participation in live sessions. The Turkish participants further indicated that the young students' limited understanding of online social etiquette caused higher stress on teachers as they tried to manage student behavior. One Turkish teacher indicated, "Because the students understand the use of technology quickly, they can sabotage the lesson. They may be distracted because of short attention span."

Even though the teachers in both countries tried to maintain some normalcy in building social relations and daily communication, they stated the lack of deep emotional connection with their students, on and off live sessions. One of the U.S. teachers mentioned that "Online meetings do not allow the children to interact with each other." Chronic absenteeism frequently indicated by the U.S. and Turkish teachers in the qualitative answers exacerbated teachers' stress and sense of exhaustion during emergency online education. An indirect advantage indicated frequently by the Turkish teachers was the concern about young students' increased idle time in front of a screen.

R.Q. 2- What kind of support did the U.S. and Turkish teachers receive during the online remote learning?

The sudden transition to emergency online education placed teachers and school administrations physically distant from each other. A section of the survey was dedicated to understanding teachers' experience with administrative support in the U.S. and Turkiye (see Table 4). 57% of American teachers rated the periodic check-ins with the administrators as effective and highly effective. 32% of American teachers rated the least effective area of support as assessing the teachers' knowledge about various non-face-to-face teaching mediums. 36.7% of Turkish teachers rated the check-ins with administrators as being highly effective and effective. 57% of the Turkish teachers reported that providing hardware to teachers and students was the least effective.

Table 4. Administrative and technical support received

Items/*Scale		*1(%)	*2(%)	*3(%)	*4(%)	*5(%)
Advanced notice to online teaching	Turkish teachers	20.61%	18.55%	25.77%	16.49%	18.55%
	American teachers	29%	15.48%	18.06%	17.41%	20%
Assessing if teachers and students had adequate hardware	Turkish teachers	34%	16.49%	25.77%	12.37%	11.34%
	American teachers	26.45%	16.80%	24.51%	17.41%	14.83%
Providing teachers and students with hardware	Turkish teachers	56.7%	20.61%	9.27%	7.21%	6.18%
	American teachers	28.38%	14.83%	20.64%	14.19%	21.93%
Assessing teachers' knowledge about non-face-to-face teaching mediums	Turkish teachers	34%	24.74%	20.61%	10.30%	10.30%
	American teachers	32.25%	18.71%	19.35%	16.12%	13.54%
Providing professional development opportunities for teachers	Turkish teachers	34%	26.80%	17.52%	10.30%	11.34%
	American teachers	12.25%	16.12%	28.38%	21.93%	21.29%
Providing technical support	Turkish teachers	47.42%	24.74%	13.40%	8.24%	6.18%
	American teachers	15.48%	23.90%	29.03%	15.48%	15.48%
Check-in with administrators	Turkish teachers	15.46%	22.68%	25.77%	16.49%	19.58%
	American teachers	12.25%	11.61%	19.35%	32.90%	23.90%

*Scale: 1=Not effective at all, 2= Not effective, 3=Somewhat effective, 4= Effective, 5=Very effective

As the rating questions revealed, the U.S. teachers felt more supported by their administration than Turkish Teachers. Responses to the follow-up open-ended question on administrative support revealed that the administrators in Turkish public schools were as inexperienced as the teachers when the government ordered an emergency transition to online education. The only outlier group of teachers emerged from the only private school participating in the study. This group anonymously indicated more outstanding administrative support. The administrator in this private school initiated frequent check-ins, arranged frequent professional development opportunities for staff, and mediated communication between the school and families.

Table 4 also shows "assessing the teachers' knowledge about various non-face-to-face teaching mediums" as the lowest-rated support area in both countries. One Turkish teacher indicated, "No

material/equipment support such as computer, mic, headphones. Buying all this equipment put an extra financial load on us." Similarly, one of the teachers in the U.S. explained that "When we transitioned initially in March, there was a severe lack of preparedness on the part of the district. Students did not have devices or internet access, and employees did not receive professional development to help learn online platforms."

Lack of access to proper technological devices and reliable internet and parents' lack of technological knowledge and skills were the most significant challenges that hampered teachers' efforts to create an effective online learning environment. The U.S. and Turkish teachers expressed their frustrations regarding their lack of knowledge and skills to use technology developmentally appropriately and their lack of support with the software and online learning platforms they adopted. A Turkish teacher stated, "Everybody learned the techniques and strategies by themselves through trial/error, Google search, and YouTube videos. There was no professional support and education provided." One of the U.S. participants explained, "The most challenging part is when platforms go down and cannot be accessed for teaching because too many people are using them at the same time."

The participants rated any opportunities to collaborate with peers or other professionals in learning communities and explained the ways of such collaboration. 84% of the U.S. and 79.4% of Turkish participants said "yes" to this question and explained how they collaborated with their colleagues. The high percentage of "yes" responses to this question from both countries demonstrates the universal human desire to connect and seek support from their kind. The U.S. and Turkish teachers informally met with their peers online, exchanged daily messages and emails, made phone calls regarding lessons and instructional support, and observed peers' teaching during online remote learning. The teachers often shared new activity ideas and ways to improve student learning. The U.S. teachers further mentioned meeting with their co-teacher or assistant teacher to discuss student progress.

R.Q. 3- What experiences did the U.S. and Turkish teachers have with assessing student progress and performance during online remote learning?

The participants were asked to indicate if the assessment they conducted during non-face-to-face instruction captured accurate information about the children's performance in the learning tasks. The U.S. and Turkish teachers had similar experiences in terms of how they assessed their students. 39% of the American participants reported using some assessment. Those who reported using assessments indicated that they had to modify the lesson and the related assessment to capture the students' progress. The teachers had to change the assessment criteria by either lowering the proficient performance criteria or skipping to assess certain areas. They had to rely more on qualitative data sources such as anecdotal notes, narrative observations during live sessions, and monitoring student work through the camera. Parents were also the primary source of qualitative data. The teachers who reported that they did not assess the students indicated that too much interference by the parents, issues with focusing on the part of the students, chronic absenteeism, and the school district's decision not to assess the students during online remote learning contributed to the challenge of evaluating student learning. 53.6% of the Turkish teachers reported using some assessment. These teachers relied on parents' input and file sharing, used online software to organize assessment tasks, changed the assessment criteria, and observed the students during the live sessions. The Turkish teachers indicated that chronic absenteeism, primarily due to lack of internet access and a device in students' homes, made assessment more challenging. A Turkish teacher indicated, "Online remote learning is an extraordinary situation. Therefore, we must consider more of the student's progress instead of using standardized performance measures. Each child should be assessed individually and guided."

Teachers in both countries reported that parents interfered during student assessment tasks or oral question-answer exchanges. Therefore, teachers could not accurately determine the students' proficient performance. One Turkish teacher indicated the disadvantages of assessment in online education as "parental interference and feeding the answers." A U.S. teacher made a similar comment, indicating the disadvantage of online assessment: "Too much parent interference or feeding the answers to the test or assignment." Many of the teachers (both U.S. and Turkish) believed that online education is not an appropriate environment to assess young children's learning. Chronic absenteeism and late and missing homework contributed to the problem of student learning assessment.

R.Q. 4- What experiences did the U.S. and Turkish teachers have with accommodating learners with special needs during online remote learning?

Children with special needs who were in general education classrooms transitioned to online education and needed specific accommodations and modifications applicable to online remote schooling. The participants from both countries were asked if and how they accommodated instruction and assessment for their students with identified special needs. More American teachers (52%) reported that they continued using the same modifications for children with special needs that they used in their face-to-face instruction compared to Turkish teachers (29.9%). American Teachers' responses revealed that the existing modifications did not work as well as they did in the face-to-face instruction. Parent involvement emerged as a crucial element in modifying instruction and assessment for students with special learning needs. Student inattentiveness or chronic absence from the virtual meetings were common problems the teachers faced. One of the teachers explained that "Teaching students with special needs requires immense support from the parent/caretaker. If they cannot sit there during the lesson and assist the student with the tasks, they are not benefitting."

29.9% of the Turkish participants reported using accommodations to meet the needs of their special needs students. 40.2% of those reported using the same accommodations they used during face-to-face instruction. Turkish teachers explained that they mostly met with the students with special needs one-on-one and met with the parents to give them tips to help their children at home. However, they could not do much to accommodate their students with special needs due to a lack of support from the school or students' absence from the live sessions. A Turkish teacher's statement echoed a similar concern across all Turkish participants: "The fact that being in a learning environment that lacks contact and effective learning creates problems in developing connections with students with special needs." They, too, had to rely on parents' or other caregivers' assistance to aid student learning at home. Another participant stated, "Students with hyperactivity could not sit in front of the screen. We asked for help from the parents."

R.Q. 5- What experiences did the U.S. and Turkish teachers have with parent involvement during online remote learning?

Assisting their young children became an obligation for parents or caregivers during emergency online education. Therefore, the question that remained was what kinds of challenges teachers in the U.S. and Turkiye experienced with parental involvement. There were similarities in the American and Turkish teachers' responses to parental involvement during online learning. Both groups reported that having parental support to help the children navigate the learning platforms was helpful. Both groups of teachers also reported similar issues with parental involvement: Parents having limited technological skills/knowledge, lack of appropriate hardware and software, inadequate internet connection, lack of quiet space to attend class, and juggling work and helping children with online learning. Table 5 demonstrates participants' ratings of different challenges.

Table 5. Experiences related to parent involvement

Items	Teacher groups	*1(%)	*2(%)	*3(%)	*4(%)	*5(%)
Helping children manage the learning technology	Turkish teachers	6.18%	13.40%	22.68%	24.74%	32.98%
	American teachers	6.45%	12.90%	26.45%	31%	23.22%
Helping children stay focused on the learning tasks during and after instruction	Turkish teachers	6.18%	9.27%	27.83%	25.77%	30.92%
	American teachers	11%	17.41%	33.54%	21.93%	16.12%
Communicating with the teacher (e.g., sending feedback, seeking further assistance, etc.	Turkish teachers	8.24%	10.30%	16.49%	21.64%	43.29%
	American teachers	10.32%	11.61%	34.83%	25.80%	17.41%

*Scale: 1=Not effective at all, 2= Not effective, 3=Somewhat effective, 4= Effective, 5=Very effective

More than half of the American teachers (31% and 23.22%) and the Turkish Teachers (24.74% and 32.98%) rated parents' efforts to manage the children learn the technology *effective*ly. This finding is commendable despite the technological challenges identified by the participants in open-ended questions. The teachers often mentioned that children's homes lacked reliable internet streaming and insufficient devices (e.g., computers, tablets)—parents' lack of technological skills added to the barriers to conducting productive online sessions. One of the American Teachers indicated that "Learning the technology. The time it would take one day for me to give the student a test, it takes two weeks for the parent to submit the test."

As emerged in the previous sections of this article, the teachers often relied on parents' and caregivers' assistance to help children stay on task and focused. Turkish teachers' ratings of parents' efforts in this area were higher (25.77% effective and 30.92% very effective) than the American teachers' ratings of parents' assistance (21.93% effective and 16.2% very effective). Many U.S. participants raised the issue of chronic absenteeism and difficulty adjusting to the online school schedule among their students. A teacher indicated, " Not having necessary materials (device, internet, materials), parents having multiple children who all needed assistance or are trying to juggle work on top of learning, creating a schedule that worked for all student schedule, work, and break." Families' home life and living conditions, addressed by participants from both countries, caused disruptions to the continuity of learning. Having multiple children who required assistance, lack of quiet study and workplace for all children and parents, childcare closings, and remaining in idle position in front of a screen for extended periods were among the struggles that interrupted children's attendance, motivation, and on-task behaviors. A Turkish teacher explained, " The most important problem the parents face is the students not participating in the class, unable to have their children listen to them, unable to have the children do their homework because the teacher won't see them."

About 65% of the Turkish teachers rated the parents' efforts to communicate with the teachers as effective (21.64%) and very effective (43.29%). Yet, the Turkish participants' qualitative responses showed that the parents could not understand the homework instructions sent home or had difficulty accessing and

understanding the content uploaded on the online learning platform. About 43% of American teachers rated the parents' communication effective (25.80%) and very effective (17.41%). The American teachers' lower rating of parent communication could be attributed to the U.S. school district having 9% (45,920) English Language Learners enrolled in grades pre-k to 3rd grade (total 421,563) in the 2021-2022 school year (NJDOE, 2022). The teachers indicated that the English language learners (ELLs) and their parents had difficulty understanding all English instruction during online remote education and instruction on accessing online learning resources, assignments, and homework.

CONCLUSION and DISCUSSION

For the research reported in this article, an international collaboration was established among three scholars - two from the United States and one based in Turkiye. Together, they explored and documented the firsthand experiences of the U.S. and Turkish preschool and elementary school teachers during their unprecedented shift to remote education prompted by the worldwide COVID-19 pandemic. Researchers have examined similarities and differences in teacher experiences amidst adopting online pedagogy, administrative support, student assessment methods, inclusive education practices for learners with unique needs, and family engagement across two distinct cultural and educational contexts – namely, the United States and Turkiye.

The findings revealed that the U.S. and Turkish teachers shared similar experiences across many of these study areas. Despite the challenges, teachers from both countries demonstrated remarkable resilience and adaptability as they transitioned to emergency online education, showcasing their creativity and problem-solving skills to meet the educational needs of their students. For instance, they successfully developed collaborations with their colleagues and collectively generated solutions to overcome obstacles. Moreover, they reported increased knowledge and competence in utilizing new technologies for educational purposes. However, the findings also highlighted that teachers from both countries recognized the need to enhance their technological knowledge during the transition phases of emergency online education, and they made concerted efforts to improve their professional knowledge and skills in this area. Despite their efforts to address the gaps in their technological professional knowledge and skills, the technological difficulties encountered by their students and parents posed significant challenges to implementing effective online education.

The concerns the US and Turkish educators voiced in the current study regarding chosen educational platforms have been similarly noted in various cultural and geographic settings (Dayal & Tiko, 2020). Our study highlights similar apprehensions among US and Turkish educators concerning selected digital learning environments. Despite broad consensus around integrating technology into early childhood education (Aldemir et al., 2019; Laffey, 2004; Voogt & McKenney, 2017), our findings emphasize substantial obstacles teachers face when attempting to deliver entire curricula via virtual channels. Addressing these challenges necessitates continuous investment in targeted professional growth programs, equipping educators with the skills and competencies necessary to thrive within today's dynamic digital classroom ecosystems. Furthermore, providing high-quality learning experiences for young students depends on navigating this ever-evolving terrain, thus reemphasizing the urgency for consistent stakeholder commitment at all levels of educational leadership.

Our investigation revealed that teachers frequently depended on parental involvement to maintain students' focus and engagement throughout the learning process. Notably, Turkish educators reported higher levels of effectiveness (25.77% rated as "effective" and 30.92% as "very effective") when it came to parental contributions compared to their American counterparts (21.93% rated as "effective" and 16.2% as "very effective"). The lack of parental contribution rated by the American teachers may be linked to the socioeconomic backgrounds of the families served by the US school district involved in the study. Many parents held blue-collar positions with irregular work hours and shifting schedules, which likely limited their ability to participate actively in their child's education. Moreover, the layoffs and business closures exacerbated these issues further, leaving numerous households without stable employment and grappling with additional stressors that detract from their attention towards their children's academic commitments. Thus, fostering a robust partnership between schools and families remains crucial in overcoming such barriers and ensuring optimal student outcomes.

In alignment with past scholarship (Brooks et al., 2020; Kaden, 2020), the present investigation uncovered a negative impact on students' active engagement in online learning activities during times of emergency remote education, primarily due to technological challenges encountered by teachers, pupils, and parents alike. By engaging in rigorous cross-cultural research collaborations, such as the one reported here, we aim to better foresight the educational challenges of prospective large-scale health emergencies. Developing data-driven predictions enables educational leaders, policymakers, and practitioners to allocate resources more strategically and implement preventive measures to minimize disruptions caused by unforeseen circumstances. Therefore, we recommend the following for early childhood and elementary education units across the World:

1. Schools can organize "Urgent Transition to Online Education" in-service training for teachers. Sub contents of this training can include creating a blueprint for an immediate transition to online education for teachers' individual or grade level classes, preparing students for transition (e.g., emotional preparation, transition activities), preparing parents for transition (e.g., communication, emotional, social and parents' academic support at home, preparing the environment), preparing teachers' own family lives for the transition, and maintaining their emotional self-care.

2. Another vital topic that schools must consider adding to the in-service training is the content that improves teachers' technological fluency in recognizing and using various online tools. In these trainings, teachers can learn to use software and hardware for different purposes fluently. For example, software tools like Kahoot or Mentimeter help measure student knowledge in a fun way. The "Go Noodle" web page can be used to exercise and entertain students physically.

3. In this research, teachers mentioned that students could not study the subjects effectively due to inattention and lack of motivation. Especially kindergarten and first-grade students had to spend long periods of sedentary time in front of the screen. A professional development program preparing teachers for emergency online education can focus on pedagogical factors affecting student learning and differentiating instruction. Topics such as effective communication with students, multi-sensory learning tasks, different grouping strategies, and pacing lesson timelines help teachers sustain student attention and engagement.

4. Besides teachers, parents can also benefit from similar training. Educational topics for parents may include preparing their children emotionally for the transition to emergency online education, arrangements needed to create a learning environment at home, tips on how parents can help their children motivate and take responsibility, communication with teachers and school administration, emergency online education tools adopted by the school and tips on how parents can protect their own self-care and emotional state.

5. In the current study, the findings further showed that school administrations in America provided better support regarding technology support and teachers' professional preparation than their counterparts in Turkiye (all schools except one private school administration). Training opportunities with similar content should also be extended to school administrators. Administrators should prepare a plan to switch to emergency online education in situations threatening public health, just as they prepare a plan for every emergency.

The COVID-19 universal health crisis has been painful and troubling to experience but also a lesson for us educators worldwide. We have witnessed the difficulties experienced by our families, colleagues, students, and their families. We made extraordinary efforts to help our students and their families overcome these difficulties, which we did not even know existed. We hope to use what we have learned from this crisis, which has been experienced by all humanity, to better prepare our schools, students, parents, and communities for possible crises in the future.

LIMITATIONS

This study can only be generalized to the context in which the study took place. However, it can inform any school professionals around the world about the experiences of early childhood and early primary grade teachers during COVID-19.

Declarations

Conflict of Interest

No potential conflicts of interest were disclosed by the author(s) with respect to the research, authorship, or publication of this article.

Ethics Approval

The formal ethics approval was granted by the Social and Human Sciences Research and Publication Ethics Committee of Necmettin Erbakan University. We conducted the study in accordance with the Helsinki Declaration in 1975.

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Research and Publication Ethics Statement

The research reported in this article was conducted in accordance with the ethical guidelines of the Institutional Review Board (IRB) at New Jersey City University (NJCU). The research proposal was approved by the Institutional Review Board (IRB) of NJCU. Date of ethical review and approval decision: 26.08.2020

Hereby, we, as the authors, consciously assure that for the manuscript is fulfilled:

- This material is the authors' own original work, which has not been previously published elsewhere.
- The paper reflects the authors' own research and analysis in a truthful and complete manner.
- The results are appropriately placed in the context of prior and existing research.
- All sources used are properly disclosed.

Contribution Rates of Authors to the Article

The authors provide equal contributions to this work.

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