The Effects of COVID-19 on Early Childhood Education

Research and Implications

By

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Dedication

We would like to dedicate this book to essential early childhood professionals, who made our children feel safe during the darkest months of the pandemic.

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Preface

Raquel Plotka

This book, as many others, began with the need to find answers. In unprecedented times, we reach out to others for answers and when we don't find them, we reach inwards, exploring all the circles of our bio-ecological environment from the most proximal to the most distal. Some questions were pressed by our students, some by our own children, and many more by our racing minds. During the spring of 2020, there was very little information and guidance on how early childhood educators could support children and families. As social scholars, we used the only tools we had: research. We began looking for answers by posing research questions, collecting data in real-time as the crisis was evolving, and trying to generate some answers for ourselves and for our students.

So many of our students were working with young children in several capacities, and we wanted to give them the most useful information. Since little information was available at the time, we needed to start from the beginning, collecting data and developing instruments. Thus, some chapters of this book were written in the midst of the crisis. We were flying the plane while building it! These chapters include data collection and analysis. Some chapters were written later in the pandemic, with our ability to look back and reflect; because, by then, more research was available, these later chapters include literature reviews and present multiple voices, reflecting on experiences and lessons from different perspectives.

The most pressing questions during the first month of the pandemic were: what do we do next? How do we conduct early childhood education programs remotely? Is that even possible? Some of our students were developing curriculum and delivering materials door to door to children's homes. They turned to us for guidance asking

questions like: What activities are more effective? What early childhood developmental learning goals can be addressed online? How do we engage families?

Families, children, and schools were experiencing stress, changes, and turmoil with educators at the center of this process, often negotiating on their own what to do next, how to implement curriculum, and how to keep young children engaged, calm, and reassured. We began with focus groups. The first few chapters emerged as answers for our students. With educators trying to cope with so much change at the most internal level, we asked how educators feel in their roles. What is their sense of efficacy in the middle of this crisis? The educators' voices were included to answer these questions.

Other questions emerged. For example, educators put together a curriculum and deliver lessons. Yet, something essential shifted. Children were seen only through a screen. What educators perceived to be effective through a screen did not always correlate with what parents were seeing at home. Educators began to ask, how are families experiencing these changes? In what ways do our experiences differ from those of the families who are seeing children face to face? Families' voices were included to answer these questions.

Teacher education programs shifted online, and even after the crisis came to a resolution, many programs have remained online. With so much focus on experiential learning in early childhood, we asked ourselves if it is possible to train early childhood educators remotely. We wondered, is this what our students want? The voices of our students, training to be teachers in the middle of a pandemic, were included as part of our answers.

As the pandemic evolved, more questions kept emerging, and we realized we needed diverse voices to address all these questions from multiple perspectives. For example, it became clear that socioeconomic status emerged as an indicator of how children and families fared. We

also wondered about the experiences of immigrant children and their families.

During the spring of 2020, my one-year-old deaf nephew was waiting for his cochlear implant, but, because of the pandemic, there were delays in non-urgent procedures; as a result, his implant was delayed for several months. In addition, he was not getting any of the early intervention services that played a central role in his development. These interruptions were taking place during a prime stage for language development. We had to change plans. Instead of waiting for a cochlear implant, my family began taking sign language lessons so we could communicate with my nephew and foster language development throughout the months of the pandemic. This experience made me wonder about the experience of children with disabilities and their families, and we decided to include their voices in this book.

Furthermore, the value of early childhood educators is often overlooked. An especially overlooked group that played a key role during the pandemic is family child care providers. As the pandemic evolved, the rules, requirements, and regulations that providers had to follow and enforce kept changing, creating stress for educators, children, and families. We decided to also include the voices of this group in the book.

Several gaps in family policies in the U.S. became more visible during the pandemic. With children at home while parents worked remotely, it became harder to ignore that working parents have child care responsibilities. The U.S. had several challenges with work-family balance, especially when it came to child care support and universal access to early childhood education; the pandemic brought awareness to these challenges. Some of the lessons learned during this period should point toward minimizing inequalities in social support for families.

As the months mounted, we wondered what lessons we wanted to take for the future. Climate change, air quality issues, and other crises might arise that might bring about similar challenges as the ones brought about by COVID-19. This book summarizes the questions we asked, the answers we found, and the lessons we learned that might prove useful in the future.

It is my deepest hope that we never face similar challenges again. Nevertheless, resilience is the product of turning difficult experiences into lessons, and the collective experiences of COVID-19 should generate insightful recommendations and give us useful tools to face whatever new challenges the future might bring.

Ruth Guirguis

I walked into my 9:00 AM class on Wednesday, March 11, 2020. I began by reminding my pre-service teacher candidates that our entire course was on Blackboard and all the readings and assignments would continue to open every week. I took the first hour of class to answer any questions students had about the news on this virus going around in the city and what may happen in terms of our class. I explicitly remember telling them that if we were to shut down, our Blackboard modules were set for us to continue class remotely. I was not sure how or if that was actually the case, but I assured them we would finish the course somehow. The news was getting worse and far more frightening than one could imagine by the minute. Finally, on Friday, March 13th, 2020, I made the personal decision to no longer send my kids to school until we had more information. My kids at the time were all in our town's junior and senior high school and, at first, were excited about not having to go to school until further notice. Knowing they would be home gave me a superficial sense of safety and a drop of hope that this dire, seemingly apocalyptic situation would get better. Little did we know that what was ahead were months of lockdown and a rising death toll. We were petrified of leaving the house and avoided it at all costs.

Schools officially shut down on March 16th, and we were all introduced to an application called Zoom.

My kids attended classes on their laptops, and I taught and stared at a screen with black boxes for the remainder of the semester. There was so much chaos, panic, unknown, and desperation to return to normal. I tried to support my kids' learning as much as I could. I designated areas of the house for them to attend class and tried to implement a school schedule as much as possible; it was a struggle, especially for my youngest. She not only had a hard time learning through Zoom, but her anxiety skyrocketed. She had always been a sporty, social child who now had no outlet to manage her anxiety. Her attention to online lessons declined rapidly, and she quickly lost track of what was happening in each class and assignment deadlines. She was so behind that I decided to sit next to her during her most important classes to make sure she was paying attention and had to constantly redirect her focus. This added to her sense of frustration. I, too, was struggling with my own classes; trying to stay connected with my students and witnessing many of them miss classes and critical assignments was a feat in itself. My adult students were struggling as much as my own children.

Teaching and learning during COVID-19 were huge challenges. Those with access to technology and home support struggled less, but learning loss was a common variable for students at all levels. Months of online learning halted learning, and those who were falling behind were now in a critical situation. Young kids showed signs of anxiety and loneliness.

Trauma from isolation and home and food insecurities had severe negative effects on children's development. The amount of support students of all levels needed required educators and teacher preparation programs to revise their teaching and engagement protocols as our post-COVID students came in with very different learning needs and expectations. Reacquainting them with in-person

learning was a challenge on its own. Learning to assess the needs of our new set of students was also a challenge that required educators to use research collected during this period and make decisions regarding curriculum that would help compensate for learning loss due to issues of inequality such as technology divides and gaps in special education services, physical care, and mental health supports. This book provides perspectives and data collected from different stakeholders during the COVID-19 pandemic. The purpose of this book is to provide lessons learned of what was effective during the pandemic, as well as the many systemic flaws of the United States educational system, to prepare all students for a better education.

Introduction

Early Childhood Education in the United States and COVID-19

The COVID-19 health crisis is an ongoing global pandemic that started in late 2019 and continues to affect people worldwide. The pandemic was caused by the emergence of a novel coronavirus known as SARS-CoV-2, which primarily spreads through respiratory droplets and symptoms ranging from mild to severe illness and led to an alarming number of fatalities. The pandemic has had a significant impact on various aspects of society (Xiang et al., 2021). Businesses and schools closed for extended periods of time, and people secluded themselves in their homes to remain safe as a race to develop a vaccine began. Business closures and massive layoffs, along with disruptions to supply chains, posed a major strain in the United States and worldwide economies.

COVID-19 has had a significant impact on early childhood education in the U.S. and worldwide. In the U.S. the early childhood education (ECE) field has historically operated on slim resources with regard to wages and low public funding; during the pandemic this weak infrastructure became evident (Kim et al., 2022). The early childhood education system in the U.S. is highly fragmented and is characterized by a combination of public and private providers, various funding sources, and a lack of a unified national framework. The pandemic had several impacts on this already fragile system.

The Central Role of Early Childhood Education

The importance of early childhood education has been widely established in the literature. Research on quality early childhood education has consistently demonstrated its significant and positive impact on various aspects of a child's life and development (e.g.,

Burchinal et al., 2000; National Institute of Child Health and Human Development Early Child Care Research Network, 2000). The early years of a child's life are a period of rapid brain development, and quality ECE programs have been shown to provide stimulating and nurturing environments that support cognitive development, language acquisition, and the formation of neural connections crucial for future learning.

Quality programs support a child's social skills and emotional development. Through interactions with qualified professionals and other children, children learn how to interact positively with peers, manage their emotions, and develop empathy, self-regulation, and conflict-resolution skills, which are critical for success in school and life.

Similarly, high-quality ECE contributes to better cognitive development, including improved grades, language skills, and problem-solving abilities (Burchinal et al., 2000). Early childhood education experiences have been shown to build a strong academic foundation for children before they enter formal education systems. Children who participated in ECE have been found to develop early literacy and math skills, narrative and language skills, and the ability to cope with social demands (Barnett et al., 1995; National Institute of Child Health and Human Development Early Child Care Research Network, 2000).

Similarly, access to high-quality early education has been found to help reduce achievement gaps due to socioeconomic disparities, and children from low socioeconomic backgrounds often benefit the most from ECE programs. In addition, participation in ECE has been shown to reduce special education needs later in life, as identifying and addressing learning disabilities early often reduces developmental delays and the need for special education services in later years (Kagan & Kauerz, 2015).

Research on the long-term effects of quality ECE has consistently demonstrated its significant and positive impact on various aspects of a child's life and development. For example, children who participated in high-quality ECE programs were more likely to graduate from high school, pursue higher education, and earn higher levels of education compared to those who did not attend such programs (McCoy et al., 2017). Consequently, adults who attended high-quality ECE programs in the past tend to have higher earnings in their careers, which benefit both the adults and the entire economy (Ruhm & Waldfogel, 2012). Finally, long-term studies have shown that individuals who participated in quality ECE programs are less likely to need welfare assistance or to engage in criminal activities, saving society monetary and societal costs (Yoshikawa, 1995).

Early Childhood Education Systems in the U.S.

Despite the importance of quality early childhood education, the ECE field in the U.S. is largely underfunded and fractured with variations in access and affordability. Early childhood education in the United States is a complex system that encompasses a wide range of programs and services designed to support the development of young children from birth to age eight. The system is characterized by a combination of public and private providers, various funding sources, and a lack of a unified national framework (Kagan & Kauerz, 2015). Some key components of the early childhood system in the U.S. include state pre-kindergarten programs, special education and early intervention services for young children with disabilities, child care and home-based programs, family-based centers, private preschools, and public kindergartens in public schools.

Many states have their own pre-kindergarten (pre-K) programs that offer early education services to 3-4-year-old children. The quality, funding, and availability of these programs vary by state (Kagan & Kauerz, 2015). On the other hand, programs such as Head Start and Early Head Start are federal programs and provide comprehensive

early childhood education, health, nutrition, and parent involvement services to low-income children and their families from birth to age five. Child care centers and home-based family centers play a central role in providing early education to young children. Private and public child care centers and home-based child care providers offer services for infants, toddlers, and preschool-aged children. Low-income families are often eligible for child care subsidies to help cover the cost of child care services. Public school systems offer kindergarten programs for 5-year-olds, and some districts also provide pre-kindergarten programs (Kagan & Kauerz, 2015). At the same time, many families rely on private preschools and early learning centers exist throughout the country to serve children from infancy through preschool age. Special Education Services and early intervention services are available for children with delays and disabilities, starting from a very young age. These services are often provided through public school districts and through home visiting programs.

The early childhood education system in the United States is diverse and varies significantly from state to state in terms of quality, availability, and funding. Additionally, there is ongoing debate and advocacy for increased investment in early childhood education to improve access and quality, as research suggests that quality early education can have a significant impact on a child's long-term development and educational success (Kagan & Kauerz, 2015). The qualifications and compensation for ECE educators vary by type of setting, and the terms teacher, educator, ECE professional, and caregiver are often used interchangeably to describe similar roles.

Early Childhood Education and COVID-19

COVID-19 has had a significant impact on early childhood education in the U.S. and worldwide. In the U.S. the ECE field has historically operated on slim resources with regard to wages and low public funding; this weak infrastructure became evident during the pandemic (Kim et al., 2022). This had negative impacts on children, educators,

families, and teacher preparation programs. Some of the negative impacts included mental health concerns, social and emotional delays, limited access to healthcare, substantial learning loss, lack of school professional services, and housing and food instabilities.

The pandemic forced many early childhood education programs, including preschools and daycare centers, to close, implement online learning, or incorporate strict safety measures to prevent the spread of the virus. These disruptions resulted in short and long-term effects for children, families, and educators (Kim et al., 2022).

For children, the disruptions caused by the many phases of the pandemic have had impacts on cognitive, social, and emotional development. With the closure of learning centers and the limited opportunities for face-to-face interaction, many young children missed out on critical learning opportunities. Early childhood is a crucial period of social development and the lack of continuous social interactions with teachers or peers might hinder children's development of social skills and emotional intelligence. At the same time, the pandemic has forced parents and other family members to take a more significant role in their children's education and development while balancing work and other responsibilities.

The pandemic exacerbated existing inequalities in early childhood education in the U.S. Children from lower socioeconomic (SES) status faced greater challenges in continuing their education during lockdowns, as access to technology and/or in-person learning opportunities varied extensively across different SES levels.

Educational institutions, educators, and policymakers have tried to address these challenges by implementing distance learning initiatives and creating safe environments for children to learn. Several lessons were learned through these trial and error attempts, and this book attempted to gather the lessons learned through the pandemic in order to generate implications for the future. Climate change, air quality

issues, and other crises might arise that might bring about similar challenges as the ones brought about by COVID-19. This book summarizes the questions asked, the answers generated, and the lessons learned that might prove useful in the future.

Organization of this Book

This book is organized in three sections. The first section consists of original research conducted during the first months of the pandemic. These studies were developed to inform practices throughout the months of the pandemic and are focused on experiences with virtual learning.

The second section consists of a combination of literature reviews and original research illustrating the way the pandemic has had different effects on diverse populations. These chapters were written later on during the pandemic, when more information regarding the impacts of COVID-19 became available. For this section, the authors collaborated with contributors with specialized expertise.

Lastly, the final section constitutes a reflection on the changes the pandemic has had on the ECE profession and on the lessons learned and implications for ECE policy to ensure a better future.

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Section I

Research on the Effects of COVID-19 on Teachers, Families, and Teacher Preparation Programs

Chapter 1
COVID-19, Virtual Learning, and Early Childhood Educators' Experiences

During the spring months of 2020, most early childhood education (ECE) programs in the United States and around the world moved to online instructional platforms. Early childhood educators were faced with teaching fully remote programs with little to no preparation time. This drastic change in instruction, along with limited teaching resources, as well as finite school and family support, created a unique demand on teachers' abilities to deliver instruction. Many early childhood programs attempted to initiate support systems to meet the needs of their teachers and students. Yet, there was no uniform call regarding what those supports should have been. Hence, teacher experiences varied widely (Pattnaik & Jalongo, 2022).

Teaching remotely presented a challenge to all educators, as well as faculty at the undergraduate and graduate levels (Kim, 2020; Plotka & Guirguis, 2020). Specifically, remote teaching in the early childhood grades created a unique set of challenges due to the active nature of young children's learning; these challenges directly impacted the engagement of young children in meaningful learning experiences. Yet, very little is currently known about teachers' experiences and the challenges they faced while adjusting to this new reality. Nor is much yet known about which of the different strategies teachers used to engage children were found to be most effective. Furthermore, there has been a paucity of research exploring the impact these challenges support systems have had on teachers' sense of self-efficacy during this health crisis.

According to Eadie et al. (2022), there were adverse consequences to the ECE workforce as well as to the well-being of early childhood educators. Specifically, a teacher's sense of self-efficacy has been shown

to play a key role in children's academic and behavioral outcomes in the preschool classroom (Gebbie et al., 2011). The present study aimed at exploring early childhood teachers' experiences with teaching virtually during unprecedented times, the challenges teachers experienced, the support teachers may have had or may have needed, and the impact these elements had on their respective sense of self-efficacy.

Early Childhood Educators' Challenges While Teaching Online

Most early childhood educators subscribe to the assumption that learning is an active process fostered by an environment that provides opportunities for exploration, manipulation, social interactions, and play (Plotka & Guirguis, 2020). These assumptions are rooted in the works of theorists such as Piaget and Vygotsky, as well as the most important approaches in early childhood education, such as those of Montessori or Reggio Emilia (Dodd-Nufrio, 2011; Edwards, 2002). In particular, Piaget believed that children are active learners and create knowledge by exploration and manipulation; children progress from manipulating objects to the ability to manipulate symbols (Piaget, 1932). Similarly, Vygotsky believed that young children make meaning of the world through social interactions with peers and adults (Vygotsky, 1978). Following these theorists, most approaches in early childhood education incorporate exploration through play, music, and the arts (Dodd-Nufrio, 2011). Thus, the idea of providing instruction to young children through a screen is mostly foreign to early childhood education and, for the most part, does not adequately align with theoretical and practical frameworks (Plotka & Guirguis, 2020); this made the transition to online teaching especially challenging for many early childhood teachers.

It should be noted, however, that even before the COVID-19 health crisis, online and virtual instruction had been expanding both in the United States and globally. For example, the Upstart program has been providing online preschool instruction for thousands of children in the

United States since 2013 (Mader, 2018). The program, funded by the federal government, has delivered online instruction to preschool children in Idaho, Mississippi, Indiana, South Carolina, rural Ohio, and Philadelphia. Thirty percent of young children in Utah attend this online preschool program (Mader, 2018). In addition, though there is currently little research on the academic results of Upstart, there is a limited body of research exploring the challenges teachers (mostly those outside the United States) have faced while teaching young children online during COVID.

The existing studies point to challenges in implementing curriculum in a developmentally appropriate way. For example, early childhood educators in Turkey reported trouble with remote learning due to a lack of student engagement and motivation (Korkmaz & Toraman, 2020). Another concern early childhood educators reported was the lack of authentic strategies provided to modify instruction and meet different types of learning styles virtually. The use of social interaction, group work, small group pair and share, and many other typical peer and collaborative teaching strategies was challenging, especially at the beginning of the new remote learning world (Korkmaz & Toraman, 2020). Keeping young children engaged in online learning proved to be the most difficult task for teachers (Szente, 2020). Particularly difficult was the task of having to reduce the time spent on a given topic to maintain students' attention and engagement while also embedding storytime, songs, music, and movement in a fluid and consistent way throughout the lesson. Teachers also navigated ways to have students share their thoughts more frequently so that teachers could hear thoughts and ideas from all students.

Pre-pandemic studies showed that some online activities allow for social interaction between students while they practice turn-taking, conversational language, and social etiquette (Theodotou & Kulovana, 2012). Similarly, studies have shown that young children benefit from adult assistance while engaging in remote learning (Theodotou & Kulovana, 2012). Teachers tried certain strategies to engage children in

remote learning with social interactions, and they had some successes. Since, for example, the virtual learning environment encourages turn-taking when individuals in online classes speak, teachers are able to hear and respond to students more effectively than in a typical in-person learning environment (Szente, 2020). Nevertheless, there has not been much more exploration of the types of activities that teachers found most effective while teaching online or to what degree early childhood teachers felt they were effective at virtually facilitating social interactions with young children.

Lastly, early childhood educators reported the challenges they experienced in managing students' emotional well-being. The adverse effect of a drastic change in routines, including separation from peers and teachers, has impacted young children's emotional and social development (Singh et al., 2020). Young children have displayed feelings of irritability, uncertainty, fear, and isolation (Singh et al., 2020). While teachers typically gather information about children's well-being using a variety of methods, including observation of children's play, interactions, and drawings, the online platform can present a challenge for teachers in observing and understanding children's well-being. Little has been explored about teachers' experiences or their ability to assess well-being in young children and their perceptions of children's emotional states.

Teacher Sense of Self-Efficacy

A teacher's sense of self-efficacy has been shown to play a key role in children's academic and behavioral outcomes in the preschool classroom (Gebbie et al., 2011). Self-efficacy is described as a person's belief in their ability to succeed in a specific situation (Bandura, 1997). Bandura explained that these beliefs determined how people feel, think, and act; he proposed that a sense of self-efficacy affects a person's perseverance in overcoming challenges, the level of effort they apply, and their presence (Bandura, 1997). Teachers' sense of self-efficacy is the belief teachers have in their ability to organize the necessary

activities to engage children in learning and impact student development and achievement. Promoting student learning involves a teacher's ability to create and plan developmentally meaningful activities, openly communicate with and support families, and assess and manage behaviors (Skaalvik & Skaalvik, 2010). Additionally, it constitutes the teacher's belief in their ability to manage teaching tasks, obligations, and challenges (Barni et al., 2019). High levels of self-efficacy in teachers have been related to high levels of self-esteem, job satisfaction, and motivation (Pinchevsky & Bogler, 2014), as well as children's academic success and positive behavioral outcomes (Gebbie et al., 2011). Yet the degree to which early childhood teachers felt self-efficacy while teaching remotely during COVID has not been explored.

Influence of Support Systems on Teacher Self-Efficacy

Teachers' sense of self-efficacy can prove especially important during times of crisis. Despite the many challenges educators face while teaching online, a teacher's sense of self-efficacy is positively correlated to the support they receive from both administration and parents (Stipek, 2012). According to Stipek (2012), administrators play a key role in a teacher's sense of self-efficacy; support from school administration could improve teacher self-efficacy, whereas a lack thereof could hinder it. Teachers' perception of support from their administrators has been shown to have a direct relationship with student performance (Stipek, 2012). Similarly, Wahlstrom and Louis (2008) found that a teacher's perception of support from their leadership had a direct effect on instructional practices. In a study surveying teachers in Turkey, teachers expressed that one of their biggest challenges in shifting to online instruction was negative attitudes between the administration and teachers, as well as a lack of support from the school administration (Korkmaz & Toraman, 2020).

Similarly, according to Skaalvik and Skaalvik (2010), teachers' perceptions of parental support were found to be as critical to teachers' sense of efficacy as administrative support; teachers' perceptions of

their relationships with families were associated with higher self-efficacy levels (Skaalvik & Skaalvik, 2010). Specifically, self-efficacy was found to be influenced by ongoing communication and collaborative relationships between parents and teachers (Skaalvik & Skaalvik, 2010). The online learning environment can prove challenging for communication between teachers and families (Leonhardt, 2020). But it also can create opportunities for communication; in some ways, communication might have increased during this time. In a Norwegian school district study, communication between parents and teachers increased during the pandemic. Parents were able to connect with their children's struggles and challenges with learning because they were able to see it with their own eyes in their homes and daily lives. Parents taking on the role of in-home educators allowed them to be more understanding and strive to communicate with their child's teacher more often than during a typical in-person school day (Bubb & Jones, 2020). Nevertheless, this study was conducted in an elementary school, and it is unclear how increased parent participation in their children's learning might have affected the virtual preschool setting, where communication with families is even more central.

The Present Study

The COVID-19 health crisis, and the resulting expansion of online instruction in the United States and the world, both have presented the opportunity to study the underexplored area of experiences and challenges related to online teaching in early childhood. Given the central role teacher self-efficacy plays in teacher motivation and children's behavioral and academic outcomes, this study aimed to explore teacher self-efficacy among those teaching online during the COVID-19 pandemic. This study especially aimed at examining challenges and supports that teachers experienced during this period, specifically teacher perception of support from the school administration, support from parents, and increases in teacher-parent communication. Finally, the role of these support systems in teachers'

sense of self-efficacy during the COVID-19 pandemic was also explored. The present study aimed to answer the following questions:

1. What have been teachers' most common experiences and challenges while teaching young children online during the COVID-19 pandemic?
2. Has teaching online during the pandemic impacted teachers' sense of self-efficacy?
3. To what extent has support from the school administration, support from families, and open communication with families impacted teacher self-efficacy during the COVID-19 pandemic?

Method

Participants

Participants were 54 preschool teachers who were teaching young children online due to the COVID-19 health crisis in a central metropolitan area in the U.S. Teachers worked in a variety of early childhood education settings, such as early childhood programs and private preschools. Table 1.1 describes the participants and shows the frequency and percentages of the participants' respective titles and the type of early childhood education program in which they taught. Most participants held the title of teacher (n = 37, 69.8%). The largest number of participants indicated working in child care programs (n = 15, 30.6%), followed by private preschools (n= 9, 18.4%). One individual did not provide informed consent, and this individual's data were removed from the dataset, thereby reducing the final sample size to 53. Participants described their classroom composition. The ages of the children in their classes ranged from 17 months old to 9 years of age, with a mean of 4.16 (SD = 1.52). The number of children in the classes ranged from 8 to 30, with a mean of 15.04 children (SD = 4.32).

Survey Item	n	%
Title		
Teacher	37	69.8
Assistant Teacher	16	30.2
Total	53	100.0
School Description		
Public School	5	10.2
Private Preschool	9	18.4
Private Faith-Based/Parochial	6	12.2
Head Start	3	6.1
Universal Pre-K	8	16.3
Child Care Program	15	30.6
Other publicly funded preschool program	3	6.1
Total	49	100.0

Table 1.1 *Participant Demographics*

Procedure and Instrument

This was a convenience sample made up of early childhood education teachers. Teachers were asked to fill out an online survey about their experiences teaching young children online during the COVID-19 crisis. Educators teaching young children solely online were recruited to fill out the survey after institutional review approval was obtained. Data collection took place a few months into the pandemic in the spring and summer of 2020. Teachers were recruited by word of mouth and volunteered to participate in the study. To answer the research questions, a survey was sent to early childhood teachers to measure their teaching experiences, challenges, and sense of self-efficacy. Teacher reports have been widely used in the study of social processes in the classrooms and teacher self-efficacy (Rimm-Kaufman et al., 2000) and have been shown to have predictive validity (Fuhs et al., 2015). The survey consisted of quantitative data, and participants reported their experiences at a single point in time. Before the survey was

administered, it was shared with small focus groups of preschool teachers teaching online to ensure that it reflected common experiences and processes taking place in the classroom based on teachers' experiences. The survey consisted of a four-point scale ranging from 1 (not effective), 2 (somewhat effective), 3 (effective), and 4 (very effective). Item descriptions for the survey are provided in the Results section. The survey assessed the following constructs:

Teacher Experiences

Several survey questions were designed to get a well-rounded sense of teachers' experiences and challenges. One of the questions asked teachers to rate items related to teachers' challenges in supporting children's development and skills virtually. Teachers were also asked to rate the developmentally appropriate activities that they found most effective when teaching online and to assess the level of children's participation in virtual learning activities. Lastly, one of the questions was designed to measure teachers' perceptions of children's well-being.

Teachers' Sense of Self-Efficacy

Teachers were asked to report on their sense of self-efficacy before the pandemic while teaching in-person and again during the pandemic while teaching online. The items touching on teacher self-efficacy were adapted from the teacher self-efficacy early childhood survey developed by Epstein and Willhite (2017).

Teachers' Perception of Support

Teachers were asked to report on their experiences of support from their school administration. It was also requested that teachers rate the level of support they perceived themselves as receiving from families in their program. Lastly, teachers were asked about the level of communication with families during remote learning.

Results

This study aimed to explore teachers' experiences and challenges while they taught online during the COVID-19 pandemic and the role these experiences, as well as their perceptions of support from administrators and parents, played in their sense of self-efficacy.

Research Question 1: What Have Been the Most Common Teacher Experiences and Challenges?

The first research question aimed at exploring teachers' challenges and experiences during the pandemic while they taught young children online. To answer this question, descriptive statistics were used to illustrate the extent of teacher experiences. The results in Table 1.2 show that teachers found it challenging to adequately address each of these early childhood goals through virtual modes of teaching. Teachers found it most challenging to support social skills, such as helping children make friends, adjust to routines, and follow rules. Teachers experienced fewer challenges when it came to teaching academic content and skills.

How challenging was it to address each of the following early childhood education goals when teaching online?	N	Min	Max	M	SD
Supporting family needs	53	1	4	2.05	0.86
Helping children learn the alphabet, numbers, or other information that will prepare them for school	53	1	4	2.32	0.93
Helping children make friends	53	1	4	2.98	0.99
Helping children interact with other children positively	53	1	4	2.45	0.95
Giving children the opportunity to play	53	1	4	2.45	1.06
Helping children learn how to follow rules	53	1	4	2.6	0.96
Helping children learn about appropriate behaviors	53	1	4	2.57	0.88