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RESEARCH ARTICLE

Self-Efficacy in Early Childhood Educators: The Impact of Online Teaching During the COVID-19 Pandemic

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Due to the COVID-19 pandemic, several early childhood education programs in the United States and around the world were forced to shift to online instruction. While virtual learning was found to be challenging for all age groups, this mode has been especially challenging for early childhood educators. The present study explored the challenges that teachers faced when adjusting their early childhood education practices to an online format during the COVID-19 health crisis and also explored those activities that teachers found most effective. Furthermore, this study explored the role of online teaching in teachers' sense of self-efficacy and assessed whether support from families and program administration played a role in teacher self-efficacy. Lessons for the role of online education in early childhood, with implications for practice, are discussed. As online instruction becomes more prominent in all areas of education, the lessons learned during the pandemic should prove informative long after the crisis is overcome.

Keywords: self-efficacy, challenges, COVID-19, online/virtual, early childhood

INTRODUCTION

During the spring of 2020, many countries around the world went into quarantine as a result of the coronavirus (COVID-19) health crisis. All early childhood education programs moved to online instructional platforms; teachers and students alike resumed their academic teaching and learning virtually. 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, school, and family support, created a unique demand on teachers' abilities to deliver instruction. In the United States and throughout the world, 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 be. Hence, early childhood programs, teacher experiences, and support varied widely.

Teaching remotely presented a challenge to all K-12 educators, as well as faculty at the undergraduate and graduate level (e.g. 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 that teachers used to engage children were found to be most effective. Furthermore, there has been a paucity of research that explores either the impact these challenges have had on teachers' sense of self-efficacy or the support systems that have had a positive impact on teachers' sense of self-efficacy during this health crisis. A teacher's sense of self-efficacy, which will be discussed in detail below, has been shown to play a key role in children's academic and behavioral outcomes in the preschool classroom (Gebbie et al., 2012). The present study aimed at exploring early childhood teachers' experiences with teaching virtually during these unprecedented times, the challenges these teachers experienced, supports these teachers may have had or may have needed, and the impact these elements had on their respective senses 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), which made the transition to online teaching especially challenging for many early childhood teachers.

It should be noted, however, that even before the current 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 few existing studies point to

challenges in implementing curriculum in a developmentally appropriate way. 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. 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 (Kulovana & Theodotou, 2012). Similarly, studies have shown that young children benefit from adult assistance while engaging in remote learning (Kulovana & Theodotou, 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 were 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 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., 2012). Self-efficacy is described as a person's belief in their ability to succeed in a specific situation (Bandura, 1997). Bandura believed 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., 2012). 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 to 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 administration and teachers, as well as lack of support from 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 even 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 child'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.

Purpose of the Present Study

The COVID-19 health crisis, and the resulting expansion of online instruction in the United States and the world, have presented the opportunity to study the most 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 major metropolitan area in the U.S. Teachers worked in a variety of early childhood education settings such as child care programs and private preschools. Table 1 describes the participants and shows the frequency and percentages of the participants' respective titles as well as the type of early childhood education program in which they taught. The majority of participants held the title of teacher (n = 37, 69.8%). The largest number of participants indicated that they were working in childcare 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 age 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).

TABLE 1. Participant Demographics

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

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 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, 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 at exploring 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 & 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 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.

(See next page for table)

TABLE 2. Teachers' Experiences of Challenges

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
Helping children learn about classrooms routines and schedules so they are prepared for school	53	1	4	2.87	1.05

Implementing activities that were developmentally appropriate and engaging for children was reported to be one of the most challenging aspects of teaching young children online. Teachers found that not all strategies worked equally effectively. Table 3 shows that teachers rated storytime/reading books, games and social activities, sing-alongs, and one-on-one time between children and teachers as the most effective activities on the online platform. Direct instruction and hands-on activities without an adult assisting at home were the least effective.

TABLE 3. Activities Teachers Found Effective

Teachers tried different online activities to engage children during this time. What activities were most effective?	*N*	Min	Max	*M*	*SD*
Storytime/reading books	53	1	4	3.05	0.86
Games and social activities	53	1	4	3.07	0.89
Direct instruction	53	1	4	2.39	0.81
Sing-alongs	53	1	4	3.05	0.79
One-on-one time with teachers	53	1	4	3.13	0.83
Hands-on activities with an adult assisting	53	1	4	2.94	0.94
Hands-on activities without an adult assisting	53	1	4	1.96	0.8
Art activities	53	1	4	2.7	0.93

Teachers reported that many children did not participate in several of the online learning activities designed to engage them. For example, Table 4 shows that the largest number of teachers indicated that only about half the class typically participated in group activities (n = 18, 34%).

TABLE 4. Children's Participation in Online Learning

How many children typically participated in learning activities?	*N*	%
None	2	3.8
A few children	15	28.3
About half of the class	18	34.0
Almost the whole class	14	26.4
Total	53	100

Managing students' emotional well-being was reported as a major challenge for early childhood educators. The negative effect of the sudden and significant changes in younger children's routines, including their separation from teachers and friends, has impacted their emotional and social development (Singh et al., 2020). In the present study, and through the survey provided to teachers, 53 early childhood teachers were asked using a four-point scale ranging from 1, not at all, 2 somewhat, 3 moderately, 4 extremely to rate their perception of the emotions their students felt during remote learning. Teachers reported that 44% of the students were somewhat disengaged, while 36% were very disengaged. Results showed that 44% of students were somewhat confused, 44% were very confused, 50% of the students were somewhat overwhelmed, and 25% were very overwhelmed. Teachers also reported that 45% of the students were somewhat sad, 25% of them were very sad, 28% were somewhat anxious, 61% of the students were very anxious, 36% felt somewhat lonely, 24% felt very lonely, and 39% were somewhat scared, while 21% were very scared. In addition, Table 5 showed teachers' perceptions of children's emotions.

TABLE 5. Teachers' Perceptions of Children's Well-Being

Emotions Young Children Experience During Online Classes	*N*	Min	Max	*M*	*SD*
Confused	53	1.00	4.00	2.67	0.95
Disengaged	53	1.00	4.00	2.56	0.86
Lonely	53	1.00	4.00	2.03	0.97
Scared	53	1.00	4.00	1.86	0.94
Sad	53	1.00	4.00	2.18	0.89
Overwhelmed	53	1.00	4.00	2.18	0.85
Anxious	53	1.00	4.00	2.28	0.94

Research Question 2: Has Teaching Online During the Pandemic Impacted Teachers' Sense Of Self-Efficacy?

To address this research question, the researchers created two measures of teacher efficacy. One measure reflected the efficacy of teachers before the onset of the pandemic while they were teaching in person, and the second measure reflected teacher efficacy after the onset of the pandemic. Based on the small sample size and unequal variances, paired *t*-tests were used to assess

teacher efficacy before the COVID-19 pandemic, while teachers taught in person, and during the COVID-19 crisis, while they taught online (Carifo & Perla, 2009; de Winter & Dodou 2010; Guerra et al., 2016; Norman, 2010). Table 6 shows that teachers experienced significantly lower levels of self-efficacy while teaching online after the onset of the COVID-19 pandemic than before the pandemic when they taught in person. All items in the self-efficacy measure were statistically significant, which indicates that teachers felt a significantly lower sense of self-efficacy when teaching remotely during the pandemic; this decline was consistent among all aspects of self-efficacy.

TABLE 6. Paired Samples T-Tests Comparing Self-Efficacy (*n*=53)

Question	Mean Pre Pandemic	Mean Post Pandemic	t	p
How much can you do to control disruptive behavior in the classroom?	3.45	1.94	11.78	0.001
How much can you do to motivate students who show low interest in learning activities?	3.52	2.13	11.22	0.001
How much can you do to get students to believe they can do well in school?	3.69	2.60	8.24	0.001
How much can you do to help your students value learning?	3.54	2.60	8.92	0.001
How much can you do to get children to follow classroom rules?	3.58	2.16	11.34	0.001
How much can you do to calm a student who is disruptive or noisy?	3.33	1.96	11.34	0.001
To what extent can you craft good questions for your students?	3.39	2.96	3.96	0.001
How well can you establish a classroom management system with each group of students?	3.58	2.43	10.24	0.001
How much can you use a variety of assessment strategies?	3.41	2.58	6.30	0.001
To what extent can you provide an alternative explanation as an example when students are confused?	3.56	2.56	7.42	0.001
How much can you assist families in helping their children do well in school?	3.35	2.88	5.14	0.001

Research Question 3: To What Extent Did Experiencing Support Predict Teacher Self-Efficacy During the COVID-19 Pandemic?

To answer this research question, the individual items were averaged to arrive at a composite score. These composite scores were computed so that simultaneous multiple linear regression could be conducted, predicting teacher self-efficacy. The efficacy scale used in this study was previously validated using all 24 items (long version) as well as using only 12 items (short version) from the scale (Tschannen-Moran & Hoy, 2001). The long version of the scale has a Cronbach's alpha of .94 and the short version of the scale has a Cronbach's alpha of .90. Tschannen-Moran and Hoy (2000) also conducted an EFA on each subscale of the instrument: instructional strategies, management, and engagement. All three subscales, for both the long and short versions, have Cronbach alphas ranging from .81-.90.

Therefore, for this study, we used a composite of the scores obtained from the short teacher self-efficacy scale version before the onset of the COVID-19 pandemic ranging from 2.62 to 4.00, with an average score of 3.50 (SD = 0.40) (Epstein & Willhite 2015; Tschannen-Moran & Hoy, 2001). Composite teacher self-efficacy scores after the onset of the COVID-19 pandemic ranged from 1.00 to 4.00, with an average score of 2.46 (SD = 0.60). The composites were also reliable, with Cronbach's alphas ranging from .90 for pre-COVID-19 teacher self-efficacy composite to .91 for post-COVID-19 teacher self-efficacy composite.

Research question 3 asked to what extent support from school administration, support from schools in the program, and open communication with families predicted teacher efficacy after the onset of the COVID-19 pandemic. To address this research question, simultaneous multiple linear regression procedures were conducted. Support from school administration, support from families in the program, and open communication with families were entered as predictors in the model. Prior to interpreting the regression model, tolerance and the variance inflation factors (VIF) were examined. Per Cohen et al. (2004), the results indicated that multicollinearity was not an issue given that tolerance values were above .10 and VIF values were less than 10.

The model was statistically significant ($F(3, 49) = 4.41$, $p < .01$, $R2 = .165$.) and accounted for 16.5% of the variance in teacher efficacy after the onset of the COVID-19 pandemic. The findings in Table 7 revealed that an increase in feeling supported by the families in the program significantly predicted teacher efficacy after the onset of the COVID-19 pandemic ($\beta = .24$, $p = .04$). Feeling supported by the school administration and keeping open communication with families were not statistically significant in the model.

TABLE 7. Regression Coefficients

Model	B	SE	β	t	p	Tol.	VIF
I feel supported by the school administration	0.16	0.10	0.21	1.50	0.13	0.81	1.23
I feel supported by the families in the program	0.24	0.11	0.31	2.11	0.04	0.72	1.37
I was able to keep open communication with families	0.03	0.13	0.03	0.24	0.81	0.76	1.30

Note. TOL = tolerance, VIF = Variance Inflation Factor. Overall model ($F(3, 49) = 4.41$, $p = .008$, $R^2 = .165$.

DISCUSSION

The COVID-19 health crisis has forced many early childhood education programs in the United States and around the world to shift to online instruction. This situation has presented the opportunity to study the experiences and challenges teachers of young children face while teaching online. Despite the global shift to online teaching, very few studies have explored early childhood educators' experiences and challenges. The present study attempted to bridge this gap in knowledge by addressing the experiences and challenges teachers faced. Similarly, despite the central role of teachers' sense of self-efficacy in children's developmental outcomes, no study has

assessed the role of online teaching in teachers' sense of self-efficacy. Lastly, this study attempted to study the role of support systems in teachers' experience of self-efficacy. Online education has been growing in recent years, and it is expected to continue to grow even after the COVID-19 health crisis is resolved. The lessons learned throughout his period can inform future online practices for teaching very young children.

Major Findings

One of the major findings of this study indicates that teachers experienced challenges when attempting to address early childhood goals in the virtual setting. Teachers found that supporting social skills, such as helping children make friends, adjust to routines, and follow rules was especially challenging. They also reported that teaching academic content and skills was less difficult. Implementing developmentally appropriate activities was also challenging in the virtual setting. Nevertheless, teachers found storytime/reading books, games, and social activities, sing-alongs, and one-on-one time between children and teachers to be most effective. Hands-on activities were only effective when adults were able to assist the children at home. Direct instruction and hands-on activities without an adult assisting at home were not very effective. However, children's participation and engagement suffered, as many teachers reported that several children did not participate in many of the learning activities. Lastly, teachers found that they perceived children as having experienced mostly confusion, disengagement, and loneliness during this period.

The pandemic and the need to teach online has significantly affected teachers' sense of self-efficacy. Teachers reported that their confidence declined when it came to their ability to control disruptive behavior, motivate students, and help children believe in themselves and value learning. Similarly, teachers felt a decline in confidence in their ability to help children follow rules, calm disruptive children, craft good questions, establish classroom management systems, use a variety of assessment strategies, clarify information to confused children, and help families. Despite these challenges and the decrease in teachers' sense of self-efficacy, however, teachers revealed that feeling supported by the families in the program significantly impacted their levels of self-efficacy.

Lessons Learned and Implications for the Future

One of the most important lessons learned from this study was that when preschool teaching went online, children's social skills suffered the most. While teachers felt that helping children develop social skills, follow rules, or adjust to routines was extremely difficult, they found teaching academic content was less challenging. This finding should be considered highly informative when contemplating online education platforms for young children, as academic skills might be promoted at the expense of social skills.

This study showed that teachers have tried to engage young children in activities that are best translated to an online platform. The activities that teachers found most effective, such as story-times and sing-alongs, were teacher-centered. Online platforms do not seem to easily incorporate child-centered activities, such as exploration and self-expression. Furthermore, despite teachers'

great efforts, almost half their students did not participate in such activities, pointing at the challenges in engaging young children in online learning.

Lastly, responses to the survey discussed here show that teaching online during a pandemic have affected teachers' sense of self-efficacy. The most important sources of support that teachers received came from families in their programs. This finding should be considered when designing interventions to promote teachers' sense of self-efficacy during crises such as the one we are enduring currently. Administrators should look into expanding opportunities for teacher-family support. In addition, since teachers felt their greatest sources of support came from families, administrators should look into providing consistent sources of support for teachers during major shifts and crises. In sum, the pandemic has presented the opportunity to learn what has worked and what has not when teaching young children online. It also revealed the need to provide teachers with more sources of support to promote teachers' sense of self-efficacy.

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