



Teaching Young Children during COVID-19: Lessons from Early Educators in Virginia

Daphna Bassok, Kennedy Weisner, Anna J. Markowitz & Todd Hall

EdPolicyWorks at the University of Virginia

Teaching Young Children during COVID-19: Lessons from Early Educators in Virginia

Summary:

- This report describes the experiences of 1,828 early educators in Virginia working with children ages 3-5 in child care, Head Start, and school-based preschool in Fall 2020.
- Just under one-half of teachers reported teaching primarily in person (45%), but child care teachers were more than five times more likely to report in person teaching (91%) than school-based teachers (18%) and Head Start teachers (14%).
- Teachers engaging in remote instruction were much more likely than those teaching in person to report concerns about the impact of COVID on young children's learning experiences.
- Nearly two-thirds of in person teachers (63%) described the quality of teacher-child interactions at their site as *good* or *excellent*; this was true for only one-third of remote/hybrid teachers (34%).
- Remote/hybrid teachers were much more likely to report concerns that children in their class were learning less than usual (81%) than in person teachers (31%).

The COVID-19 pandemic upended teaching and learning in early childhood education (ECE) classrooms. While children of all ages experienced dramatic changes to their educational environments, 3- to 5-year-old children faced unique challenges. Young children learn primarily through hands-on experiences and close interactions with peers and caring adults. These types of experiences were disrupted by the pandemic.

Many ECE programs around the country, especially child care centers, significantly adjusted their usual routines to continue offering in person care and education. They reduced group sizes, adhered to physical distancing and masking guidelines, and restricted activities to maintain health and safety. These changes often made it harder for educators to teach young children. Playing,

sharing, and close interactions help young children learn and develop, and were more challenging with the new safety procedures in place.¹

Engaging preschool-age children remotely also proved daunting. Young children often lacked the attention span to stay focused on online learning and required significant support from a parent or guardian, who often was juggling other work or caregiving.² Remote teachers found it difficult to develop foundational social and emotional skills, identify student needs, and scaffold their instruction.³

Despite the importance of early learning experiences for school readiness and children's long-term learning trajectories, much of the research on learning during COVID-19 has focused on older, K-12 children. Understanding how the pandemic impacted the learning experiences of preschool-age children is critical for reducing the long-term ramifications of COVID-19 on young children.

Using survey data from 1,828 teachers working with children 3-5 years of age in ECE classrooms in Virginia, this report addresses this gap by describing the impact that COVID-19 had on teaching and learning in ECE classrooms. It compares the experiences of teachers whose primary mode of instruction was in person teaching to those who either taught fully remotely (e.g., online class meetings, video lessons, or learning packets sent home) or through a hybrid of remote and in person teaching.

The report is organized into four main sections. The first section gives a brief overview of the survey and sample. Section 2 describes the challenges of teaching young children during COVID-19, including changes to typical in person activities and the challenges of remote/virtual instruction. The third section explores teachers' perceptions of the impact of COVID-19 on teaching quality and their ability to assess and identify children's needs. The final section describes teachers' concerns about children's learning and their social and emotional development.

1. Overview of the Survey & Sample

With funding from their Preschool Development Grant Birth-5 (PDG B-5), the Virginia Department of Education (VDOE), in partnership with the Virginia Early Childhood Foundation (VECF) and the University of Virginia (UVA), has implemented a set of initiatives aimed at building a more cohesive ECE system.⁴ As part of this effort, the UVA team has administered a series of early childhood workforce surveys to better understand the experiences of early educators in Virginia.

This report uses data from a PDG B-5 teacher survey conducted between October and December 2020. All teachers working with children ages 0-5 for at least 30 hours per week at center-based programs participating in the PDG B-5 were invited to take a survey about their experiences working with young children during the COVID-19 pandemic. This survey was distributed online and on paper, was available in English and Spanish, and could be completed in about 30 minutes. Teachers who completed the survey received a \$20 gift card. In total, 4,019 teachers responded to the survey, a response rate of 77%.⁵ This report focuses on the 1,828 lead teachers and co-teachers who reported working with preschool age children (3- to 5-year-olds) across three of the largest formal ECE sectors (e.g., child care centers, school-based programs, and Head Start classrooms).

The average teacher was 41 years old, and nearly all teachers were female (98%). Two-thirds of teachers (66%) were White, 22% were Black, and 6% were Hispanic. About two-thirds of teachers (68%) had at least a bachelor's degree, and one-quarter (23%) had no post-secondary degree. Over one-third of teachers (39%) lived in households with total incomes below \$45,000 per year. On average, teachers' hourly wage was \$19.73, but this ranged from \$7.25 to over \$40 per hour, with significant variation by sector.

Overall, 39% of teachers worked in child care centers, 37% worked in school-based programs, and 24% were Head Start teachers.⁶ As shown in Table 1, just under one-half of teachers (45%) reported that they had been working primarily in person since August. The remainder (55%) reported that they had either been teaching remotely or doing a hybrid of remote and in person instruction. Mode of instruction varied considerably by sector. While nearly all child care teachers (91%) reported teaching and caring for children primarily in person, this was true for just 18% of school teachers and 14% of Head Start teachers.

Table 1. Mode of Instruction, by Sector

	In person teaching	Remote/hybrid teaching
Overall (N = 1828)	45%	55%
Child care teachers (N = 713)	91%	9%
School teachers (N = 672)	18%	82%
Head Start teachers (N = 443)	14%	86%

Of the teachers who reported regular remote instruction, about three-fifths (59%) reported doing a hybrid model of teaching that included a combination of both in person and virtual instruction. The other two-fifths of these teachers (41%) reported primarily teaching exclusively remotely. In this report, the responses of teachers doing any regular remote teaching – including fully remote instruction and the hybrid model – are grouped together.

2. Classroom Experiences During COVID-19

Changes to In Person Instruction

Teachers who continued to do at least some in person teaching made significant changes to their routines, including social distancing, mask wearing, and more intensive cleaning protocols. Despite these efforts to ensure health and safety, teachers remained worried about the risk of working in person. Two-thirds of all in person and hybrid teachers (67%) reported that they were moderately or very concerned that families might send sick children to their site, 48% reported concerns that people would be exposed to COVID-19 at their site, and 39% were concerned that co-workers would come to work sick.

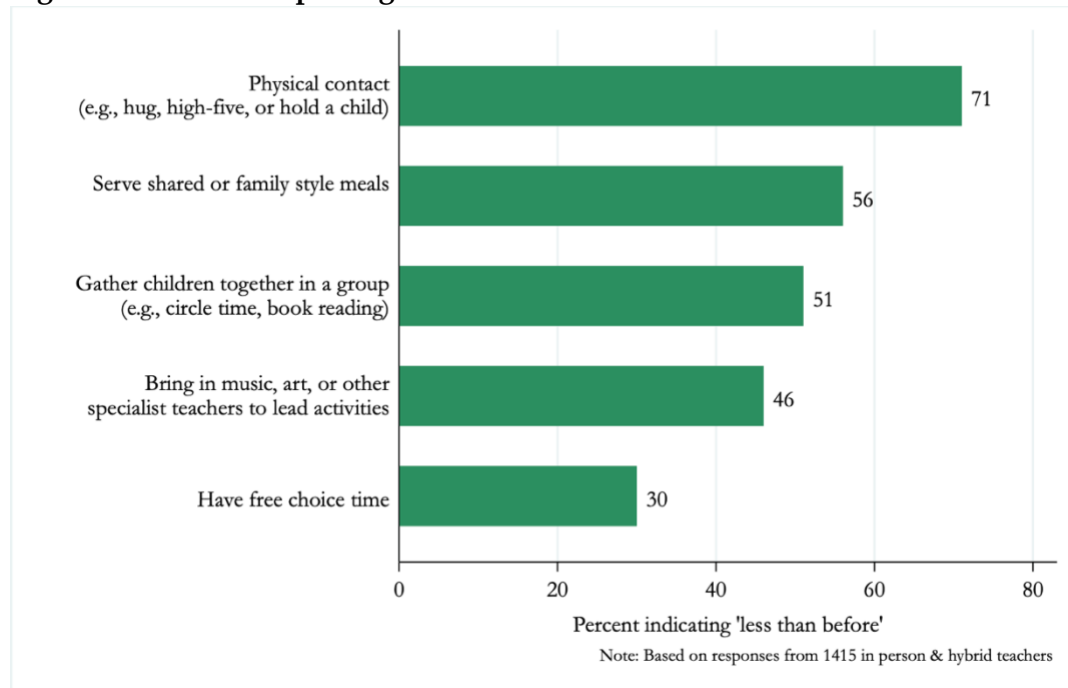
Teachers were also concerned about the effect of COVID-19 on their teaching ability. Nearly one-third of teachers (30%) reported that they were moderately or very concerned that stress from COVID-19 would impact their teaching. One noted, “I feel stressed about my students’ safety because I cannot always keep them distanced.... I feel stressed about my health as well because I have more contact with my students than recommended due to the nature of their age and level of needs. The extra time spent planning, cleaning, and distancing leaves me exhausted at the end of each day.”⁷

Many teachers reported making changes to their typical practices in order to adapt their teaching to the COVID-19 context. Figure 1 shows the

“Trying to enforce social distancing with younger students is extremely difficult and not developmentally appropriate for these children who are just beginning to learn about personal space and appropriate interactions with peers/adults and creates more instances of corrective actions by the adults.”

percent of teachers who reported they engaged in common, in person activities less often due to COVID-19 precautions. Nearly three-quarters of all in person and hybrid teachers (71%) reported declines in physical contact, such as hugging, high-fiving, and holding children. About one-half reported that they were having less shared or family style meals than they had before the pandemic (56%); that they were less likely to gather children together in a group for a book reading or circle time (51%); and that they were bringing in music, art, or other specialist teachers to lead activities less often (46%).

Figure 1. Teachers Reporting Declines to Common In Person Activities



Teachers noted that implementing these changes was difficult. One wrote, “Trying to enforce social distancing with younger students is extremely difficult and not developmentally appropriate for these children who are just beginning to learn about personal space and appropriate interactions with peers/adults and creates more instances of corrective actions by the adults.”

Another said, “The children want to directly play with their friends in the classroom but have to keep their distance. They sometimes don't quite understand no touching or hugging.” A third added, “It's very hard to tell preschoolers to stay six feet apart from each other, when all they want to do is be in each other's' presence. At times I feel like I am hurting their emotional state with the constant reminders of distance.”

Challenges of Remote/Virtual Instruction

Over one-half of all teachers – and nearly all teachers working in Head Start and school-based programs – reported some form of regular remote teaching since August. These teachers found interacting with preschool-aged children and holding their attention in a virtual environment to be difficult.

Most remote/hybrid teachers (88%) reported that they were holding live group or individual meetings with the children in their class. However, 12% indicated that they were not holding any live, virtual classes with children. Overall, remote/hybrid teachers reported a median of just 6 hours of direct, virtual interaction with children during the previous week.

Some teachers reported low attendance at these virtual sessions. Only 85% of remote/hybrid teachers reported that many or all children were regularly attending remote classes. In comparison, nearly all teachers primarily teaching in person (99%) reported that many or all children were attending classes regularly. In some cases, low attendance at virtual sessions may have been related to children’s internet access. Over two-thirds of remote/hybrid teachers (68%) reported that at least one child in their class did not have access to reliable internet, and 17% reported that many or all of the children in their class lacked reliable access to the internet.

In addition to live, virtual meetings, teachers reported several other forms of remote instruction and interaction. Most (86%) indicated that they were communicating with children and families through email or text message, and

“I have always been confident about my ability to work with children, but this virtual platform is totally new and I’m not sure if I am making an impact.”

85% reported sending home physical materials to use. About two-thirds (69%) also reported sharing pre-recorded videos for children and families to watch on their own.

One teacher summarized the challenge of remote instruction: “It has been difficult to ensure everyone can access the required materials- from lack/late receiving of devices for each student to attendance issues. The

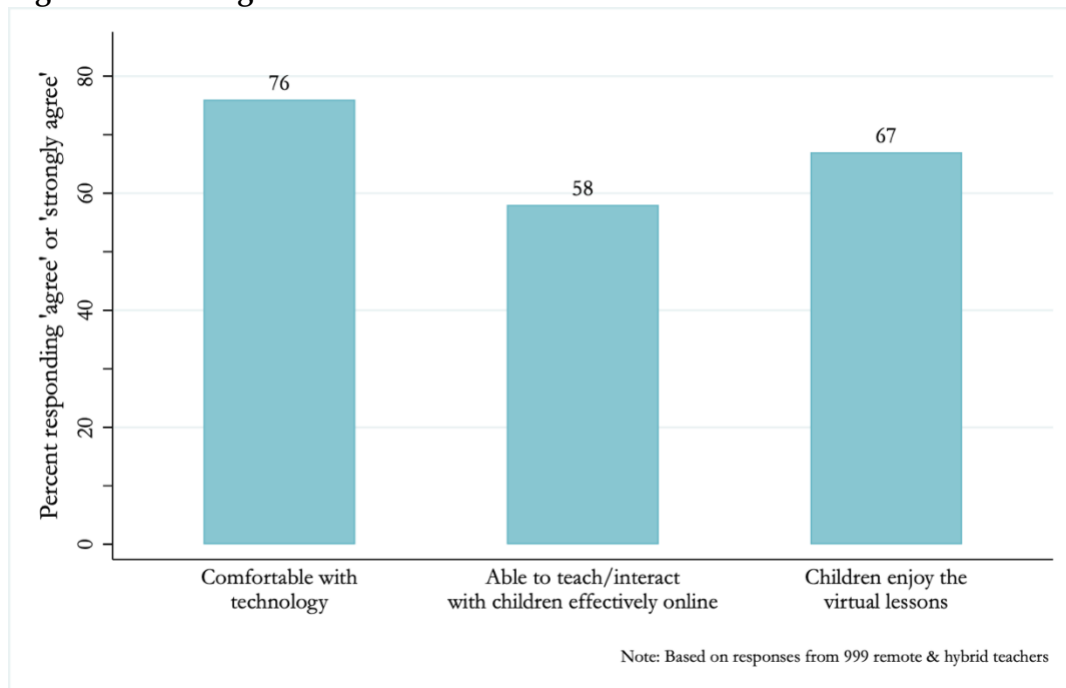
amount of time and effort to create and provide materials to send home has been VERY costly and stressful since they require hands-on activities rather than the stuff on a computer. While I understand and know the reason for the current classroom options, my students are not making the progress I know they could be making if they were receiving the regular time allotted in in person learning.”

Teachers also struggled to adapt their teaching to a virtual format. As shown in Figure 2, 76% of remote/hybrid teachers agreed that they were comfortable using

technology to teach virtually, meaning that one-quarter of remote/hybrid teachers were *not* comfortable with using the necessary technology.

In addition, just over one-half of remote/hybrid teachers indicated that they were able to interact with children effectively online (58%), and only two-thirds (67%) believed that the children in their class were enjoying the virtual lessons. One teacher wrote, “I am extremely frustrated with virtual learning. I am not a tech person, but I am trying to do the best I can with what I have. The children don’t seem as engaged as they would be in person. I realize we are in a pandemic and only if it is safe we should return to the classroom, but it is difficult teaching virtually.” Another noted, “I have always been confident about my ability to work with children, but this virtual platform is totally new and I’m not sure if I am making an impact.”

Figure 2. Challenges of Remote/Virtual Instruction



3. Quality of Teaching During COVID-19

Teaching Quality

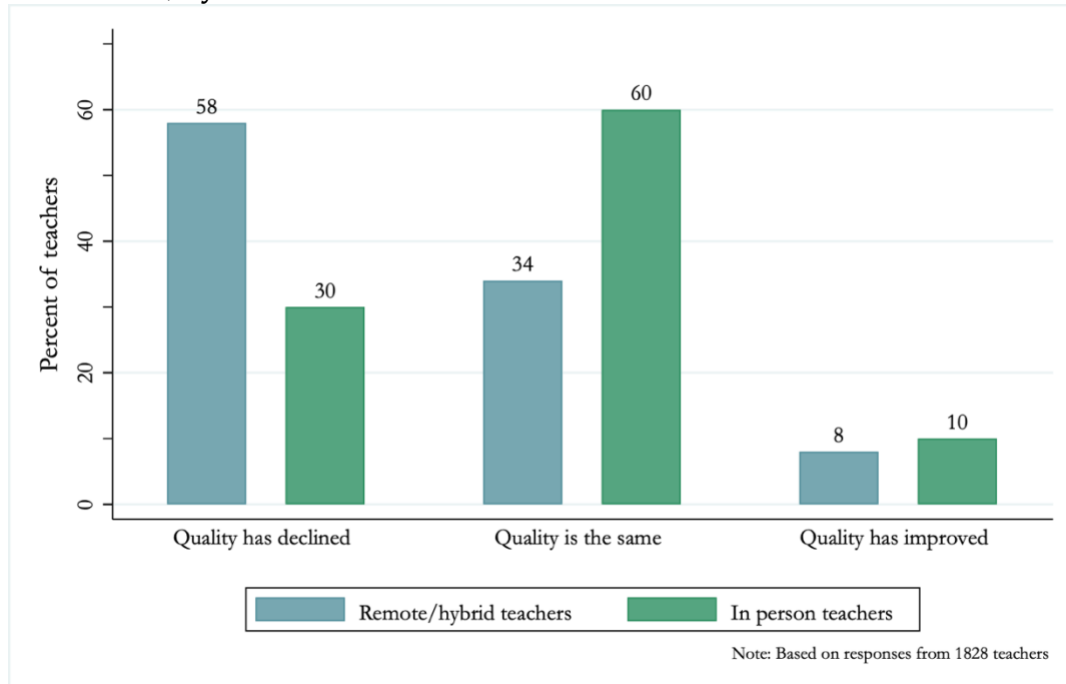
Most teachers reported that the quality of teacher-child interactions at their site had either stayed the same (46%) or even improved (9%) compared to before the pandemic. Still, many teachers (45%) indicated that COVID-19 had negatively impacted the quality of teacher-child interactions at their site due to pandemic-related challenges.

One teacher wrote, “Wearing masks impacts our students’ abilities to see facial expressions by teachers and peers to better understand emotions, as well as [their ability to] communicate clearly (impacting articulation and the ability to understand others at times).”

Remote/hybrid teachers were nearly two times more likely to report declines in interaction quality, as shown in Figure 3. Over one-half of remote/hybrid teachers (58%) reported that the quality of interactions with children had declined at their site, compared to only about one-third of teachers working primarily in person (30%).

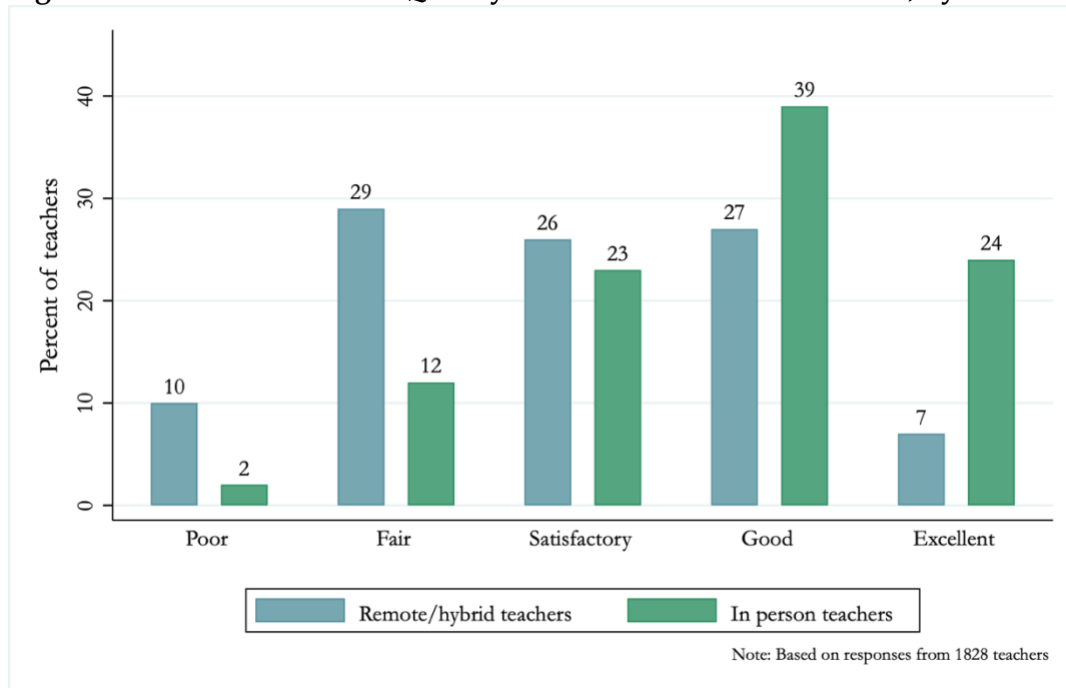
One remote/hybrid teacher wrote, “It’s just been hard having organic teaching/learning experiences through the computer and tablet. I’m a very responsive, in the moment, flexible, creative teacher which works very well face to face in a classroom. It’s harder online. I miss seeing the relationships form among the students- we try to facilitate in online, but it’s not REALLY happening.” Another added, “Remote learning has made it difficult to build our language skills. Often, I have a hard time hearing the students or the ways they articulate words because it is done over a computer.”

Figure 3. Reported Impact of COVID-19 on the Quality of Teacher-Child Interactions, by Mode



As shown in Figure 4, nearly two-fifths of remote/hybrid teachers (39%) indicated that their virtual interactions were *poor* or *fair*. This was true for only 14% of in person teachers. About one-third of remote/hybrid teachers (34%) described their virtual interactions as *good* or *excellent*. Nearly twice as many in person teachers (63%) reported that their interactions with children in the classroom were *good* or *excellent*.

Figure 4. Teachers’ Perceived Quality of Teacher-Child Interactions, by Mode



Some teachers also faced the additional burden of teaching children online and in person simultaneously: 14% of all teachers – and about one-quarter of remote/hybrid teachers – reported that they had done both in person and virtual instruction *at the same time*. These teachers reported challenges attending to children in both modes at once and ensuring that everyone was receiving a high-quality learning experience.

One hybrid teacher wrote, “With teaching both in person and virtual students AT THE SAME TIME, I am having a difficult time focusing on all...I feel like I am tied to the computer because the virtuals connect in at specific times. Sometimes the flow of the classroom kids does not lend them to be absolutely ready for each log in time. I feel like I am not giving my best to either population.”

A second hybrid teacher added, “I find it hard juggling both in person students and virtual students. I want to make sure they both get what they need. When I am simultaneously teaching in person and virtual I sometimes feel I cater to one or the other. It is hard finding that balance.”

Assessing Children and Providing Needed Services

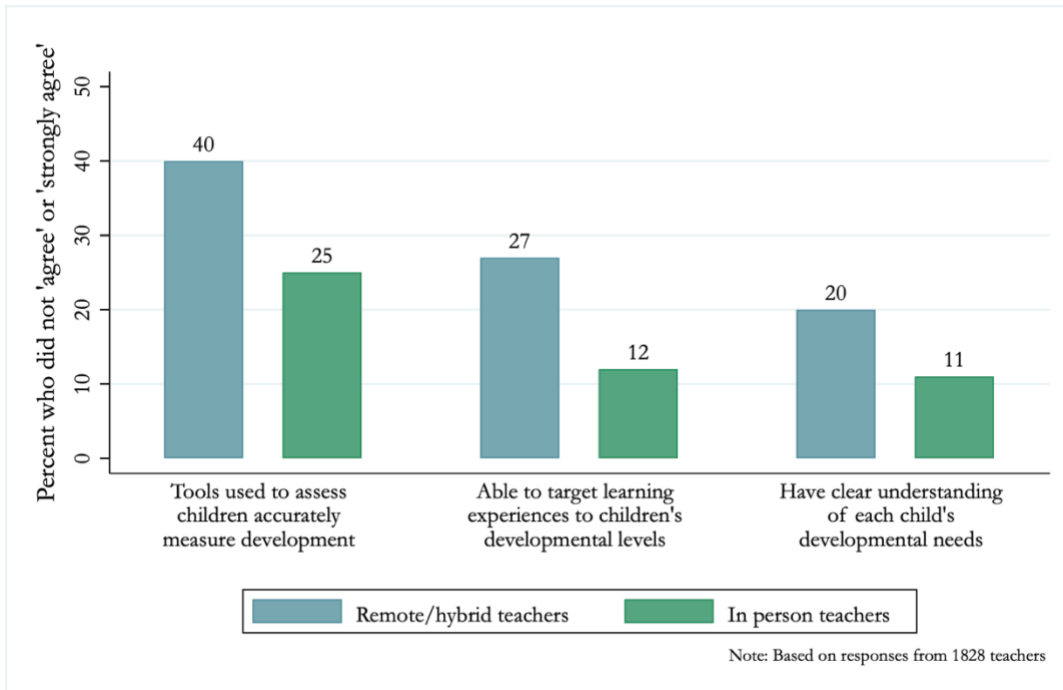
While many teachers reported they felt able to effectively assess children, some teachers – particularly remote/hybrid teachers – reported difficulties. As shown in Figure 5, 40% of remote/hybrid teachers indicated that they did not believe that the tools used to assess children were properly measuring child development, compared to one-quarter of in person teachers.

One remote/hybrid teacher noted, “It’s hard to assess the virtual students’ needs and abilities when they are not in the classroom to observe and work with. Some of the students only watch pre-recorded videos and we don’t know how much they are learning and what they need to work on or reinforce.” A second added, “If we were in person, I would be able to assess student behaviors and interactions and make a plan from there (i.e. have resource teachers observe, get second opinions). Because I only get a snip of who they are over the computer, I feel helpless.”

Over one-quarter of remote/hybrid teachers reported challenges with appropriately targeting learning and activities to meet children’s developmental needs (27%), and one in five indicated that they did not have a clear understanding of each child’s developmental needs. One teacher elaborated on these challenges: “I feel disconnected from families, especially those who come and pick up supplies but don’t tune in to virtual sessions and therefore I feel disconnected from the kids as I don’t know if the supplied activities are developmentally appropriate for them or how I could differentiate further.”

“If we were in person, I would be able to assess student behaviors and interactions and make a plan from there (i.e. have resource teachers observe, get second opinions). Because I only get a snip of who they are over the computer, I feel helpless.”

Figure 5. Teacher Concerns About Assessing Children’s Skills and Identifying Needs, by Mode

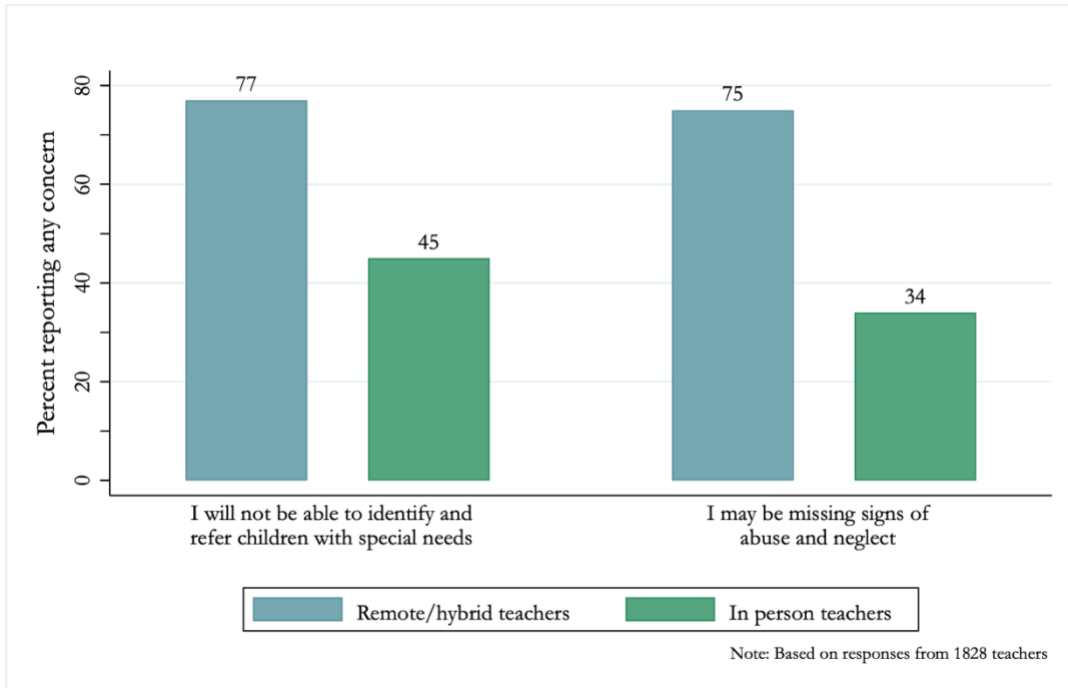


Teachers expressed concerns about their ability to identify children who may have undiagnosed special needs and those who may be experiencing abuse or neglect. As shown in Figure 6, these concerns were particularly high among remote/hybrid teachers. Three-quarters of remote/hybrid teachers (77%) expressed at least a little concern about their ability to identify virtual learners who may have special needs; just under one-half of in person teachers (45%) also noted this concern.

One remote/hybrid teacher wrote: “The students that I suspect have special needs seem like they will fall through the cracks or get left behind, especially since they haven't been identified yet and are displaying some key signs. However, it is very difficult to tell due to teaching virtually. I am not able to observe enough evidence to support my thoughts.” Another added, “Since we are teaching remotely, it is hard to assess behaviors and observe interactions with children. I have a student that I believe needs support other than me, and because I have to rely on technology, I am unable to observe the student.”

Teachers also raised concerns about their ability to identify abuse and neglect in the virtual learning environment. Remote/hybrid teachers were more than two times more likely (75%) to express this concern than in person teachers (34%).

Figure 6. Percentage of Teachers Reporting Concerns Identifying Children, by Mode

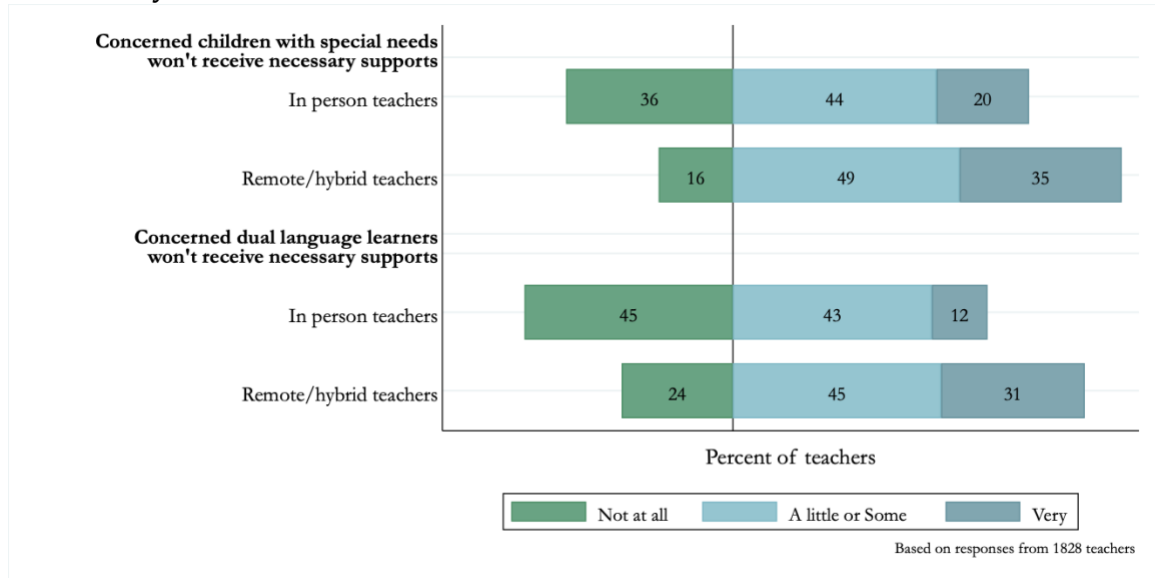


In addition to concerns about identifying the needs of the children in their care, teachers also worried about whether students already identified as having special needs⁸ or who are dual language learners (DLL) were receiving necessary and appropriate services.⁹

As shown in Figure 7, 84% of remote/hybrid teachers and 64% of in person teachers reported that they were at least a little concerned that children with special needs might not be receiving the services and supports that they required. Remote/hybrid teachers were nearly twice as likely as in person teachers to indicate that they were *very* concerned that children with special needs were not receiving adequate support (35% compared to 20%).

Teachers reported similar concerns about DLL children. Three-quarters of remote/hybrid teachers (76%) and 55% of in person teachers reported at least a little concern that DLL children were not receiving necessary supports. Remote/hybrid teachers were again more than twice as likely to indicate that they were *very* concerned about DLL children’s access to needed supports (31% compared to 12%).

Figure 7. Percentage of Teachers Concerned Children Won't Receive Needed Services, by Mode



One teacher elaborated: “All of my students are special needs and one is dual language, and I teach both F2F and virtually at the same time. It is very difficult on any given day to meet the basic needs of these children, but with COVID-19 restrictions and their needs, it is even harder to make sure that the students are getting what they need.” Another added, “All children with special needs are receiving services but I’m very concerned about the quality of the interactions. My children learn best with in person instruction, modeling and intervention. Progress is extremely slow with virtual services, but my little ones can’t tolerate a mask for 30 seconds which keeps us from working in person.”

Finally, teachers worried about children’s ability to access necessary mental health supports, with 44% of remote/hybrid teachers and 28% of in person teachers reporting this concern. One teacher shared, “I worry about mental health and developmentally appropriate issues more than the physical sickness associated with COVID. 4-5 year old children learn by sharing and participating in group activities and this has been severely impacted by the virus.”

4. Teacher Concerns about Children’s Development

Learning During COVID-19

Just as concerns about interaction quality and assessing children were highest among remote/hybrid teachers, teacher reports of how much children were learning also differed by mode of instruction. As shown in Figure 8, about two-

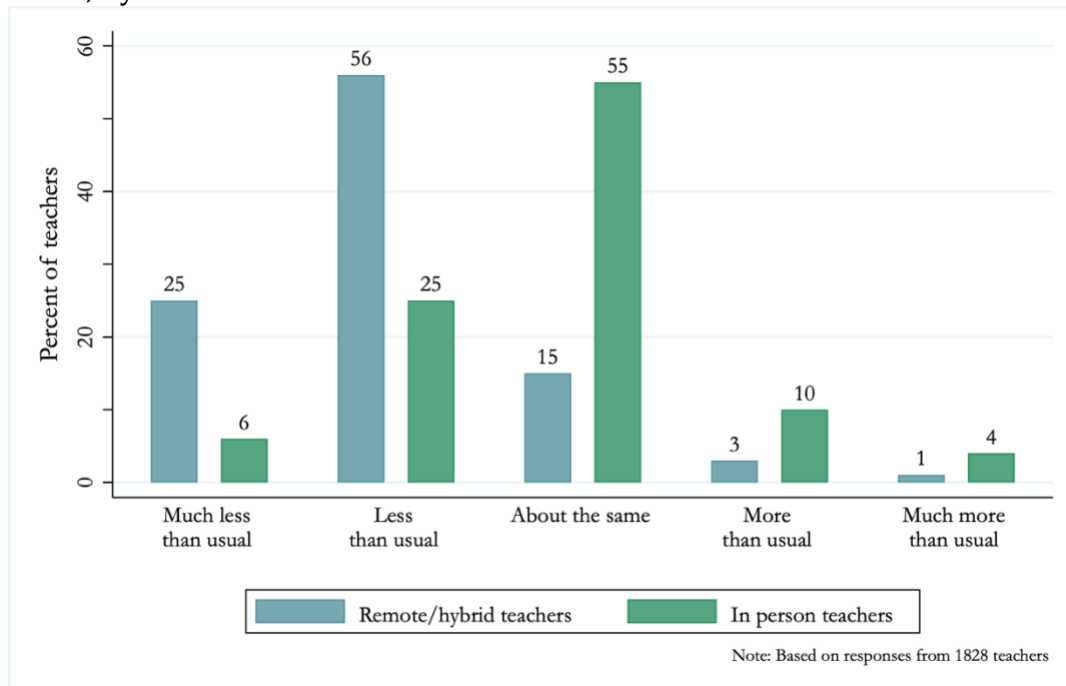
thirds of in person teachers (69%) reported that children were learning about the same or more than usual in the classroom. Just 19% of remote/hybrid teachers reported this about their virtual learners. Moreover, remote/hybrid teachers were about four times more likely (25%) to say that children were learning much less than usual, compared to in person teachers (6%).

“Preschool is a lot about getting kids ready for school by being in school, in a supportive environment, learning all those behaviors that will help them become successful students. Not being IN school is making this almost impossible.”

One teacher noted, “Due to COVID each student is in the classroom half the time from previous years. That means it takes twice as long for them to adjust to coming to school. Twice as long for them to learn something, twice as long to expose them to the world around them and to positive things....in a whole school year they will only get half a year’s worth of teaching.”

Another teacher added, “Preschool is a lot about getting kids ready for school by being in school, in a supportive environment, learning all those behaviors that will help them become successful students. Not being IN school is making this almost impossible.”

Figure 8. Teacher Reports of How Much Children Are Learning Compared to Usual, by Mode



Children's Social, Emotional, & Behavioral Challenges

As shown in Figure 9, teachers' concerns about the impact of COVID-19 on social and emotional development were high: 72% of remote/hybrid teachers and over one-third of in person teachers (37%) reported that they were moderately or very concerned.

One teacher wrote, "I am worried about the social emotional growth of the children. Teachers are having to work exceptionally hard to manufacture opportunities for authentic SEL practice which in other years happens naturally all day." A second teacher described, "Due to COVID I feel that social growth is greatly hampered as students are unable to play together, problem solve social issues, and build close friendships. This is a very important time in young children's development where they are building the foundations of social skills and learning how to work together and cooperate."

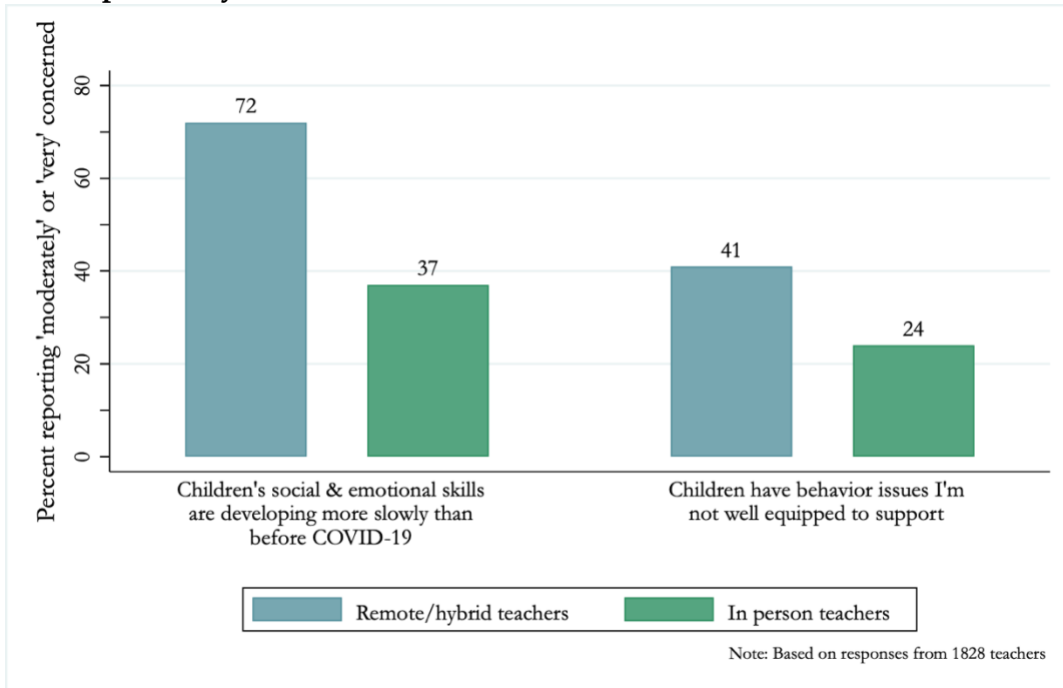
"My students are learning less this year about playing with their peers, appropriate social skills, and emotional reactions and responses because there is no opportunity for conflict that creates teachable moments in preschool."

Another teacher added, "My students are learning less this year about playing with their peers, appropriate social skills, and emotional reactions and responses because there is no opportunity for conflict that creates teachable moments in preschool. For example, if everyone has their own set of cars and a ramp, then no one is taking a toy that another child wanted in turn creating an opportunity to learn about how to ask for a turn and then

wait. I am fearful of what the lack of spontaneous social emotional learning will mean for this group of children in the future."

Some teachers, including 41% of remote/hybrid teachers and 24% of in person teachers, reported concerns about their ability to support children's behavior issues. One stated, "It's hard to grasp the attention of some of the more active children with behavior problems and it's hard to come up with strategies to help get them focused during individualization and large group time."

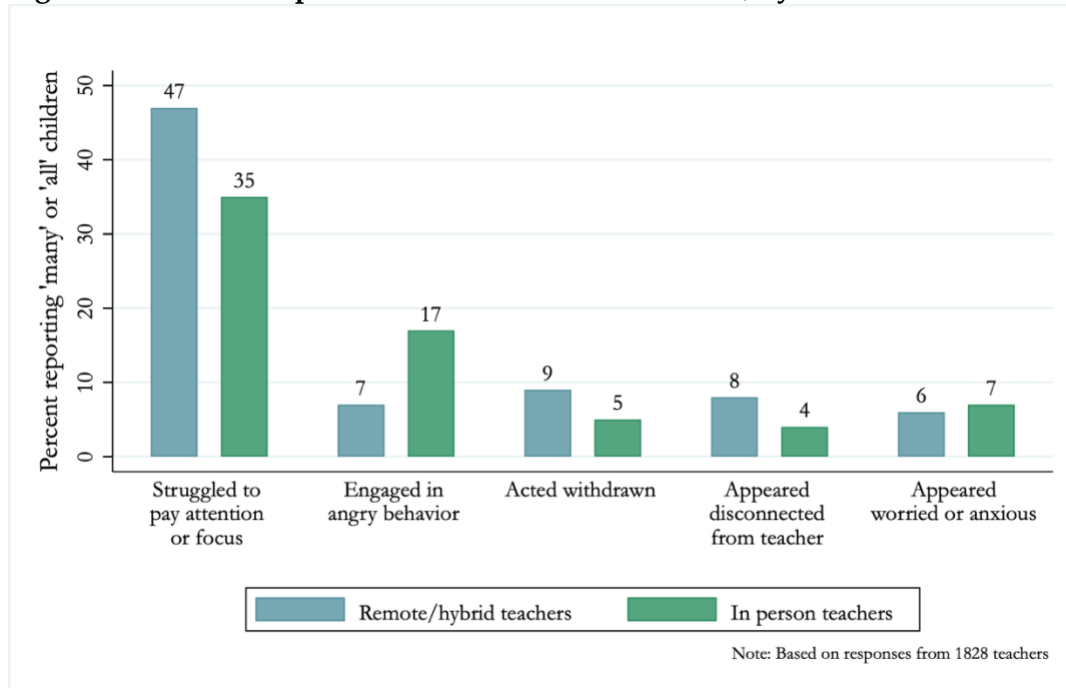
Figure 9. Teacher Concerns about Supporting Children’s Social & Emotional Development, by Mode



Teachers also reported that children were exhibiting a variety of behavior problems, the most common of which was an inability to pay attention or focus. As shown in Figure 10, nearly one-half of remote/hybrid teachers (47%) and one-third of in person teachers (35%) indicated that *many or all* children had attention issues during instruction, and almost all teachers across modes of instruction indicated that at least a few children in their class were struggling to pay attention or focus. One remote/hybrid teacher noted that during virtual lessons, “Most of the time the children are far more inattentive and have worse behavior than they would in a school setting.”

Though less common, there were teachers across both modes who reported that many or all children in their class were engaging in angry behavior, acting withdrawn and appearing disconnected or worried and anxious. One teacher shared, “Severe behaviors developed in at least one student during the school closures and these behaviors are exhibited frequently in the classroom, impeding the learning of other students as well as endangering staff and students with potential exposure to COVID-19 through spitting and biting.”

Figure 10. Teacher Reports of Child Behavior Problems, by Mode



Implications

Teaching young children during the COVID-19 pandemic has been challenging across both in person and remote settings. Programs that continued to offer in person care and education implemented new routines and protocols to maintain health and safety. ECE teachers found it more difficult to teach foundational skills in this context and were often still fearful of the possibility of COVID-19 spreading at their site.

Teachers working remotely struggled to interact effectively with young children online and keep them engaged. Nearly one in four remote/hybrid teachers reported that they were not comfortable with technology. Similarly, almost one in five reported that many or all of the children in their class did not have reliable access to internet for virtual lessons. Some teachers felt defeated by the task of teaching students in the classroom and online simultaneously.

Overall, early educators reported that COVID-19 undermined their ability to provide high-quality instructional experiences and affected how much children were learning. Those teaching remotely were significantly more likely to be concerned about the quality of teaching and learning. Remote/hybrid teachers were almost two times more likely than in person teachers to report that teacher-child interaction quality had declined and about half as likely to rate quality as *good* or *excellent*.

While more than two-thirds of in person teachers reported that children were learning about the same or more than usual, only one out of five remote/hybrid teachers also agreed with that statement. Almost three out of four remote/hybrid teachers – compared to just over one-third of all in person teachers – reported being moderately or very concerned that children’s social and emotional skills were developing more slowly because of COVID-19.

The findings from this survey suggest that children’s needs may not have been identified and met with appropriate services. Teachers, including a wide majority of those teaching remotely, worried that they could not identify children suffering from abuse or neglect. Teachers worried that they could not identify children in need of intervention and that even those children with identified special needs (e.g. children with disabilities, dual language learners, and children with mental health needs) were not receiving necessary services.¹⁰

Each of these challenges with teaching and learning may have disproportionately impacted low income, Black, and Hispanic children who were more likely to be in fully remote programs. Given the struggles teachers reported with remote teaching, this raises concerns that the pandemic widened preexisting racial, ethnic, and socioeconomic disparities in access to high-quality early learning experiences.

As the nation begins to recover from the COVID-19 pandemic, sustained and significant investments are urgently needed to help teachers, ECE programs, and communities best serve young children. First, children stand to benefit from in-person learning opportunities as soon as it is safe to do so. Summer camps and other more informal summer programs could provide children with the kind of social interactions many have lacked for the past year.

Beyond this, children are likely to enter school this fall with a far wider range of skills and needs than in prior years. Many will be unfamiliar with the norms of in person classroom behavior and peer interaction. Others may have undiagnosed special needs. Comprehensive screenings will be necessary to quickly assess children’s needs, as will intensified support services for children who lacked appropriate supports and intervention over the past year. In addition there is likely to be a subset of children who need to continue with remote or hybrid learning. ECE programs will need to find better ways to meet these children’s needs.

Early educators will play a critical role in this recovery process, as they have throughout the pandemic. They do challenging work, oftentimes for very little pay and with very little support. Investments in professional and financial supports for ECE teachers are essential. With these investments policymakers

can retain effective teachers, strengthen the environments that children experience as they return to in person learning, and mitigate the long-term impacts of COVID-19.

Endnotes

¹ Grindal, T., Smith, S., Nakamura, J., & Granja, M. (2021). Early childhood education during the COVID-19 pandemic: The experiences of Arkansas educators. *SRI International*. Retrieved from https://www.sri.com/wp-content/uploads/2021/02/ARISE-Memo_Early-childhood-education-during-the-COVID-19-pandemic_02042021_with-Appendices.pdf

² Sonnenschein, S. & Stites, M. (2020, November 25). It's not just ABCs – Preschool parents worry their kids are missing out on critical social skills during the pandemic. *The Conversation*. Retrieved from <https://theconversation.com/its-not-just-abcs-preschool-parents-worry-their-kids-are-missing-out-on-critical-social-skills-during-the-pandemic-150434>

³ Carr, R.C. (2020). *The North Carolina Pre-Kindergarten program and remote learning services during the COVID-19 Pandemic: Findings from a statewide survey of teachers*. Center for Child and Family Policy, Sanford School of Public Policy, Duke University. Retrieved from https://childandfamilypolicy.duke.edu/wp-content/uploads/2020/08/NC%20Pre-K%20Remote%20Learning%20COVID%20Report_7.2020_Final.pdf

⁴ Towards this goal of strengthening its ECE system, VDOE has been incrementally expanding the work of PDG B-5 to communities across the state. In the initial year, 26 cities and counties across Virginia, representing about one-third of the state's population, participated in PDG B-5 activities. In the second year, PDG B-5 expanded to include a total of 70 cities and counties across the state, accounting for about two-thirds of the Virginia's population. In each of these communities, all publicly funded ECE programs, including school-based, center-based, and home-based programs, were invited to participate in PDG B-5.

⁵ This response rate is high, as surveys of early educators typically do not exceed 40%.

Boyd-Swan, C. & Herbst, C.M. (2019) Racial and ethnic discrimination in the labor market for child care teachers. *Educational Researcher*, 48(7), 394-406. <https://doi.org/10.3102/0013189X19867941>

⁶ In Virginia, Head Start programs are located in both school- and center-based settings but are disaggregated for the purpose of this report.

⁷ Some quotes in this report have been lightly edited for clarity.

⁸ Children with special needs include those with an Individualized Family Service Plan (IFSP) or Individualized Education Program (IEP), a diagnosed disability, a chronic illness or medical problem, or a severe social/emotional problem.

⁹ In this sample, 65% of teachers reported that they had at least one child with special needs in their class, and 63% reported that they had at least one dual language learner (DLL) in their class. Statistics presented here include reports from all teachers regardless of whether they indicated having a child with special needs or a DLL in their class.

¹⁰ Barnett, W. S. & Jung, K. (2020). Understanding and responding to the pandemic's impacts on preschool education: What can we learn from last spring? *National Institute for Early Education Research*. Retrieved from https://nieer.org/wp-content/uploads/2020/11/NIEER_Special-Report_July_2020_What_Can_We_Learn_From_Last_Spring_UPDATED_August_2020.pdf