



Professional Development in the Time of COVID-19

Evidence and Insights from Early Educators in the Boston Public Schools

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Policy Issue

This brief is part of a larger body of research examining the Boston Universal Pre-K (UPK) expansion and the Expanding Children’s Early Learning (ExCEL) P-3 Project focused on sustaining children’s early learning gains. As we navigate the repercussions of the ongoing pandemic, there is a growing need to understand how districts can better support early educators in their classrooms. Using survey data from Pre-K and third grade teachers in the Boston Public Schools, we provide a descriptive analysis of the professional development supports early educators received from the district in spring 2021. Our findings offer lessons for districts on how investments in professional development supports can strengthen early learning instruction.

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Key Findings

- 1 UPK and third grade teachers received a range of professional development supports in the years following the start of the pandemic, both from the BPS district and from staff within their own center or school.
- 2 However, UPK teachers received much higher levels of training, coaching, and curriculum implementation support overall than BPS third grade teachers. UPK teachers rated these supports more highly than third grade teachers did.

Introduction

The ongoing global COVID-19 pandemic has brought unprecedented challenges to the critical work of educators. Schools have struggled to maintain high-quality instruction, address students' learning setbacks, and support teachers' mental health and wellbeing (Ferren, 2021; Gewertz, 2021).

A flurry of research has documented these challenges (e.g., Markowitz et al., 2021; Weiland et al., 2021a; Zhang et al., 2021). However, there are several critical gaps in the evidence base that are important to fill to inform policy and practice. In particular, we know very little about the professional development (PD) supports that teachers received from districts during the crisis to help them deliver high-quality instruction (Weiland et al., 2021b). We know even less about teachers' perceptions of the efficacy of these supports and how they varied across the early grades and different learning contexts. Pre-pandemic, teachers across the country reported fairly low levels of satisfaction with PD supports; less than one-third of a nationally representative sample of U.S. teachers in grades K-12 were satisfied with their professional development activities, and more than one-third of novice teachers felt that working with a mentor was only a little useful or not useful at all (García & Weiss, 2019).

With the pandemic necessitating a “new normal” for

teachers, there is a pressing need to better understand whether and how districts' investments in PD supports during the crisis have been helpful or added to the stressors educators were experiencing. This evidence can help guide additional investments, particularly as localities make important decisions about how to strengthen programming during the pandemic recovery. To address this need, we use data from a unique sample—teachers in community-based Pre-Ks participating in the Boston Universal Pre-K (Boston UPK) Initiative and third grade teachers in Boston Public Schools (BPS) elementary schools—collected in the spring 2021, about a year after the start of the pandemic. Helpfully, our sample represents the two ends of the spectrum of educators in the early childhood years that the Boston Public Schools has worked to support during the crisis.

Using descriptive analysis, we examine the following research questions: *What teaching and learning supports did Boston UPK and BPS third grade teachers receive during the 2020-2021 school year? How helpful did they find these supports?*

We find that while both UPK and third grade teachers received a wide range of professional development supports, UPK teachers received higher levels of support and rated these supports highly. Our descriptive findings provide potential lessons for districts on how professional development supports can help maintain high-quality instruction for teachers across different grades and learning contexts.



The Boston Public Schools: Universal Pre-K and Third Grade

Our study data come from teachers in community-based early childhood centers participating in Boston's universal Pre-K (UPK) initiative and from third grade teachers in the Boston Public Schools. These grades represent the two ends of the early childhood developmental period typically overseen by public schools in the U.S. In BPS, these grades are structurally distinct and overseen by different district departments.

Universal Pre-K (UPK). Boston's public Pre-K program has garnered a high profile in the past 15 years due to its attention to quality and research-backed practices (Kabay et al., 2020). The program began in 2005 with then-Mayor Thomas Menino's vision of offering free public universal Pre-K education to all four-year-olds in Boston. While the program began in public schools, it recently expanded to partner with existing community-based organizations (CBOs) as well to make more high-quality Pre-K seats available to Boston's four year olds. This mixed-delivery expansion effort is known as Boston UPK. Lead Boston UPK teachers in these settings are compensated on the same pay scale as BPS K-12 teachers, with a starting salary of around \$64,000 for the 2020-2021 school year (Boston Teachers Union, 2021). Lead teachers in CBO UPK classrooms must hold a BA minimum. UPK programs are managed by Boston's Department of Early Childhood, which also oversees kindergarten to second grade in public schools.

As the Department of Early Childhood has been building out the UPK program in CBOs over the past two years, it has purposefully integrated intensive, targeted instructional supports for UPK teachers aligned with how the public school Pre-K program was implemented. Pre-pandemic, all UPK teachers were being trained to implement Focus on K1, a synthesis of two evidence-based curricula: an adapted version of Opening the World of Learning, a language and

literacy curriculum that includes a social-emotional skills component in each unit, and Building Blocks, an early mathematics curriculum that also promotes language development by requiring children to explain their mathematical reasoning verbally (McCormick et al., 2017). District instructional coaches worked with teachers to monitor fidelity to the curriculum and support high-quality implementation. A condition of participation in UPK is that CBOs implement the Boston curricula, coaching, and PD models in participating UPK classrooms. When the pandemic began, Boston's UPK team pivoted, redesigning this PD and coaching to help teachers navigate public health safety guidelines for in-person learning and shift curriculum for UPK centers offering remote learning options.

BPS Third Grade. In third grade, curriculum and supports for elementary school teachers are overseen by the BPS Academics Department. Curricula in third grade are determined by each school, through BPS's autonomous schools model. Third grade teachers are able to participate in regular trainings hosted by the district and their own school administrators and can also receive coaching from district and school staff. However, like curricula, professional development opportunities for third grade teachers also tend to vary by school due to the autonomous schools model. Principals determine the best approach to support their particular context (McCormick et al., 2020), and elementary schools can opt out of district-wide initiatives and reforms as they choose.

Learning Formats in the 2020-2021 Year. Following the start of the pandemic, BPS elementary schools went fully remote until April 2021, switching to a hybrid model with some students in-school and others learning remotely each day, and then eventually to all in-person by the end of the year. In contrast, all but one of the UPK programs delivered in-person instruction during the 2020 – 2021 school year, only temporarily moving to a remote learning environment in situations when there were COVID-19 outbreaks.

Sample

Our sample includes 38 Boston UPK lead teachers working in 21 CBOs and 67 BPS third grade teachers from 46 BPS schools. This sample represents teachers from 75% of Boston UPK centers and 60% of BPS elementary schools. Almost all teachers in the sample were female with an average of about 13 years of teaching experience. However, as shown in Table 1, teacher characteristics differed between UPK and BPS third grade. UPK teachers tended to be more racially and ethnically diverse and were more likely to speak another language in addition to English. They also had a few more years of experience both in total and at their current school or center. BPS third grade teachers tended to have higher levels of education, with most teachers holding a master's degree, and were also more likely to have obtained a Massachusetts teaching license.

Table 1: Teacher Demographic Characteristics, Education, Certification, and Experience

Characteristic	Universal PreK Teachers Mean or %	BPS Third Grade Teachers Mean or %
Female (%)	100	90
Race/Ethnicity (%)		
Black	34	16
Hispanic	11	14
White	29	64
Asian or other race	26	3
Language(s) spoken other than English		
Spanish	14	13
Vietnamese	17	0
Language other than English, Spanish, or Vietnamese	25	4
Highest Level of Education (%)		
Associate's degree	16	0
Bachelor's degree	68	7
Master's degree or higher	16	93
Massachusetts teaching licensure (%)		
Early childhood	25	13
Elementary school	0	91
Other license	3	80
Does not have a license	72	3
Teaching Experience (years)		
Mean years total teaching (SD)	13.96 (7.38)	11.78 (7.73)
Mean years teaching at current center or school (SD)	9.44 (7.38)	7.00 (5.53)
Mean years teaching in current grade or level (SD)	10.27 (6.96)	7.05 (6.53)

Note: Percentages were rounded to the nearest whole number. Sample sizes for each section ranged from N = 35 to N = 38 for UPK teacher responses, and from N = 62 to N = 67 for BPS third grade teacher responses.

Data Collection and Analysis

Survey participation was voluntary, and teachers were allowed to skip any questions they did not wish to answer. The UPK survey was administered in the spring of 2021, about one year after the pandemic began. The survey took about 20 minutes to complete, and teachers were provided with a \$25 gift card as compensation for their time. Approximately 51% of the contacted lead UPK teachers responded to the survey. The BPS third grade survey was administered during the same spring 2021 timeframe. The survey took about 40 minutes to complete, and teachers received \$25 to purchase classroom supplies to thank them for their time. In total, 78% of the contacted third grade teacher sample responded to the survey, and they were demographically representative of the broader population of BPS third grade teachers.

Importantly, we fielded identical or nearly-identical survey questions about teachers' sources of support across the two instruments. We then used simple descriptive statistics based on teachers' answers to multiple-choice survey questions to answer our research questions. We complemented our quantitative descriptive findings with qualitative data from teachers' survey answers to free-response questions.



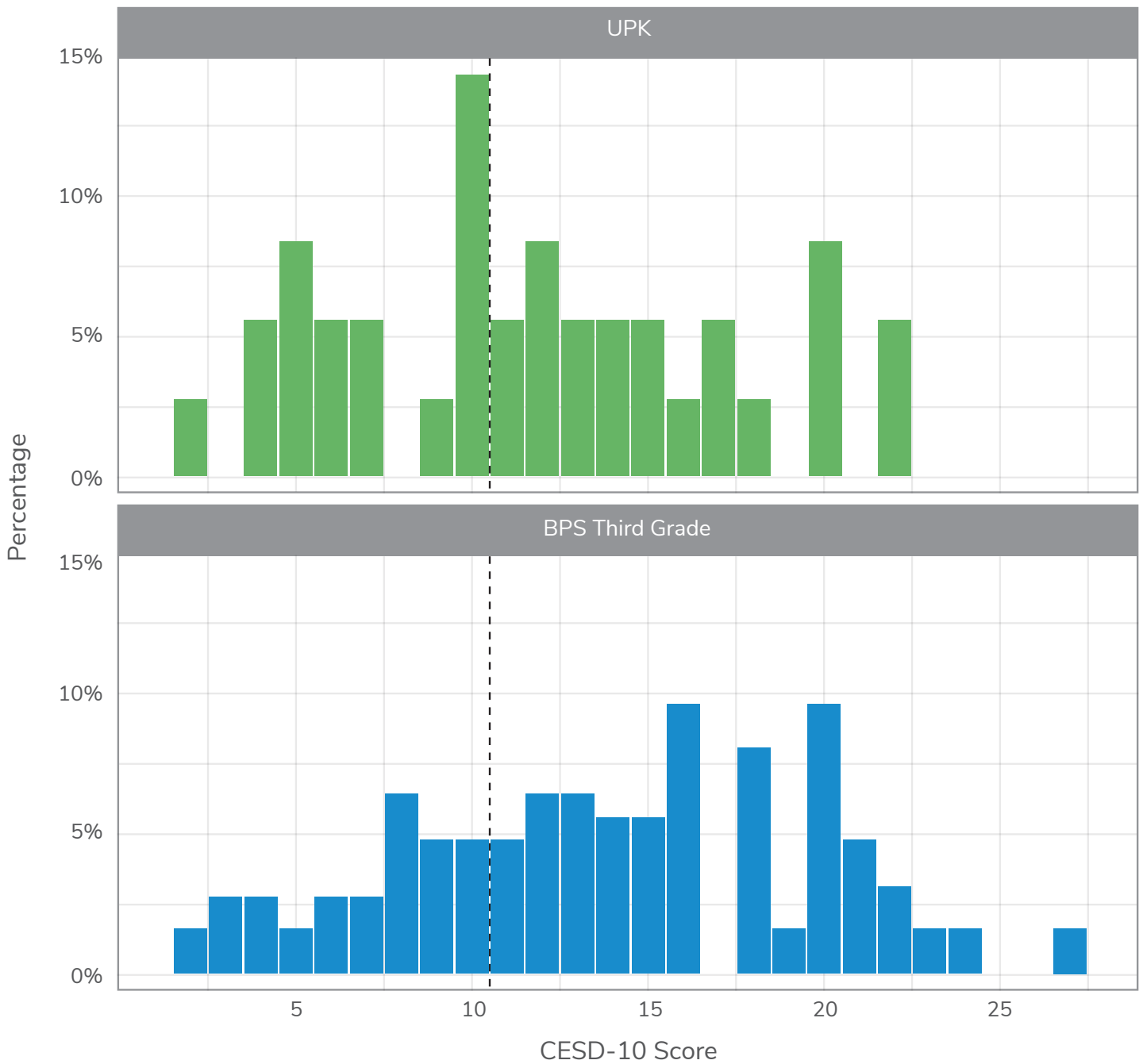
Findings

Context: Teacher Well-Being During the Pandemic

Consistent with other research on teacher well-being during the pandemic (e.g. Markowitz et al., 2021; Tulsa SEED Study Team, 2020), UPK and BPS third grade teachers reported clinically significant symptoms of depression and moderate to high levels of stress, with particularly high stress among BPS third grade teachers. We measured teachers' levels of depression using the 10-item version of the CESD (Andersen et al., 1994; Radloff, 1977). Total scores on this measure can range from 0-30, and a score greater than 10 is indicative of mild to significant depressive symptoms. The distribution of teachers' scores in both UPK and BPS third grade are shown in Figure 1. 69% of UPK teachers (mean total score = 11.74, SD = 5.47) and 74% of BPS third grade teachers (mean total score = 13.68, SD = 5.92) scored greater than 10, passing the threshold for clinically significant levels of depression. We measured levels of stress on a scale from 1 (low) to 5 (high). UPK teachers reported a moderate level of current job stress (mean = 3.11, SD = 1.11), while BPS third grade teachers indicated a higher level of current job stress (mean = 4.12, SD = .97). While we did not have a pre-pandemic comparison for UPK teachers, BPS third grade teachers reported experiencing significantly lower levels of job stress for the time period before the pandemic (mean = 3.03, SD = .98).



Figure 1: CESD-10 Scores for UPK and BPS Teachers



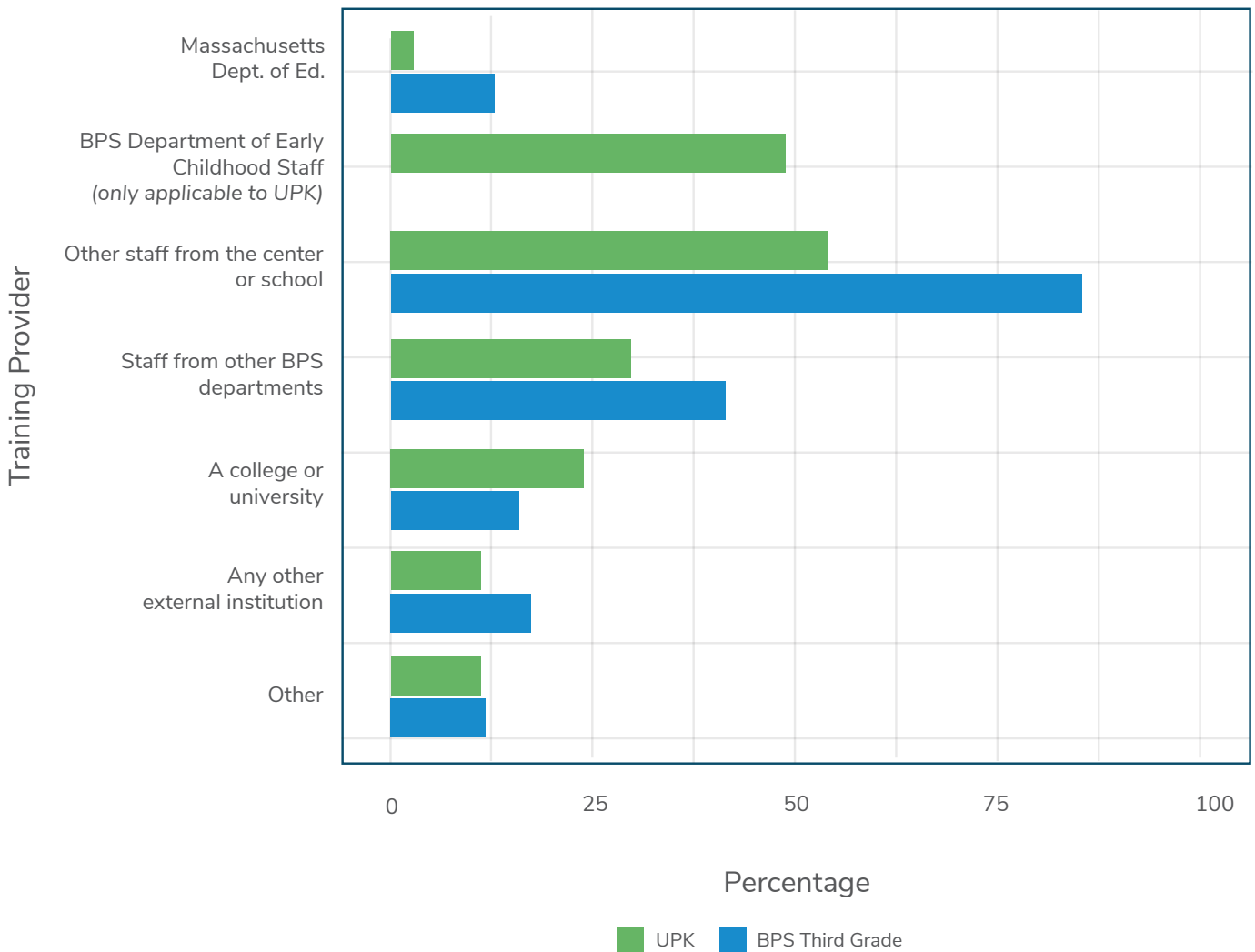
Note: For this table, N = 36 for UPK teachers, N = 63 for BPS third grade teachers. The dotted line indicates the cutoff for clinically significant levels of depression.

District Supports During the Pandemic

Professional Development. Sources of professional development are shown in Figure 2. UPK teachers most commonly received training from BPS online professional development opportunities (54%), from other staff at their center or school (54%), and from the BPS Department of Early Childhood (49%). A majority of BPS third grade teachers received PD

from other staff in their school (85%), while a smaller group reported receiving PD from staff in other BPS departments (42%). Overall, each UPK teacher reported using an average of 2-3 of the PD providers listed during the school year, and together UPK teachers listed receiving a total of 87 PD supports. BPS teachers reported using an average of 1-2 of the PD providers listed each and together received a total of 95 PD supports during the school year.

Figure 2: Professional Development Training Providers

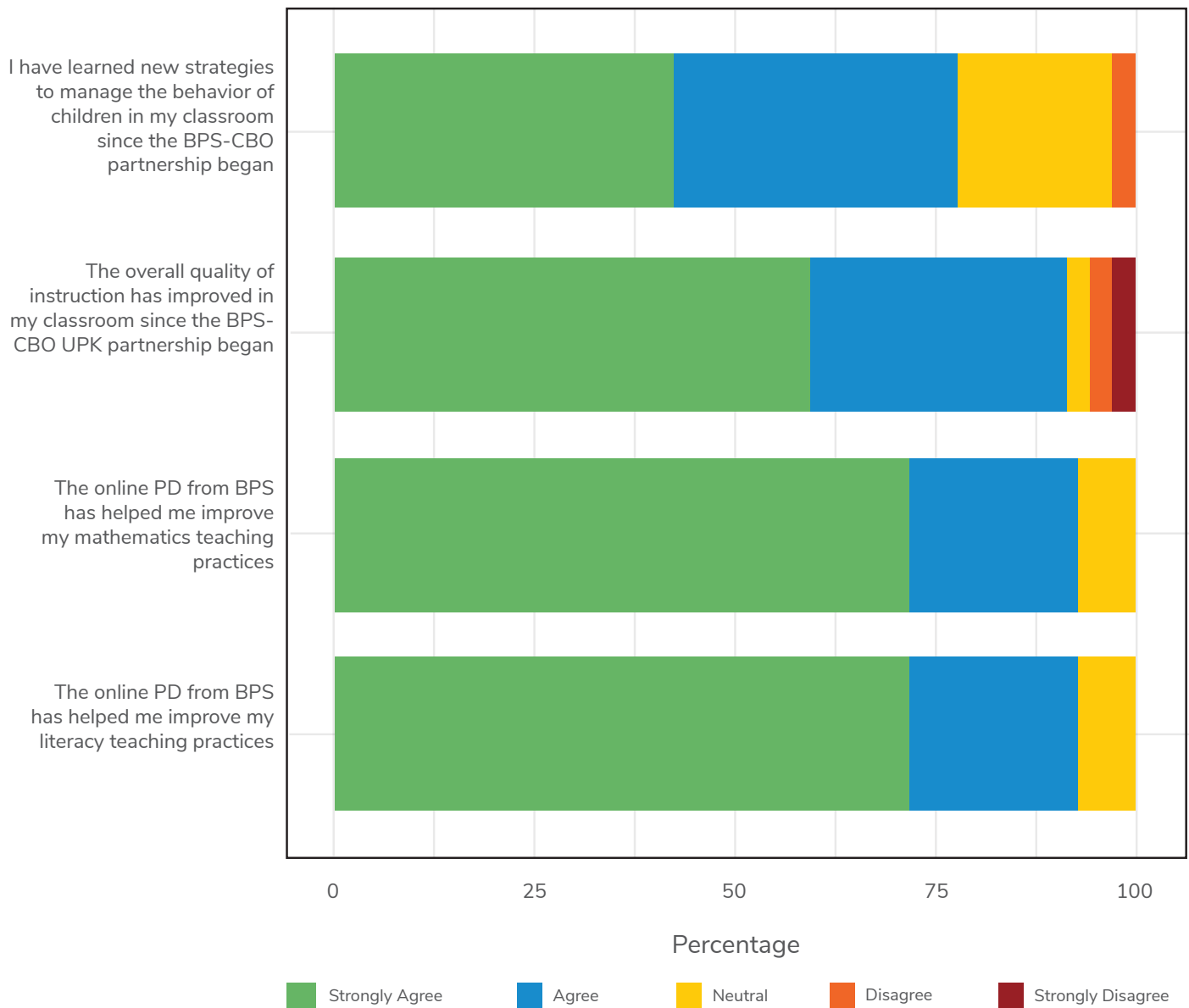


Note: For this figure, teachers could select multiple training providers. N = 37 for UPK teachers. N = 67 for BPS third grade teachers.

Overall, UPK teachers rated their PD experiences positively, with 92% of teachers agreeing or strongly agreeing that the overall quality of instruction in their classrooms had improved since the BPS-CBO UPK partnership began and since they were offered BPS PD opportunities (Figure 3). In contrast, BPS third grade teachers had more mixed perspectives on supports from the district. While some teachers expressed appreciation of the training that their principal or other school leaders provided, others would have liked to see

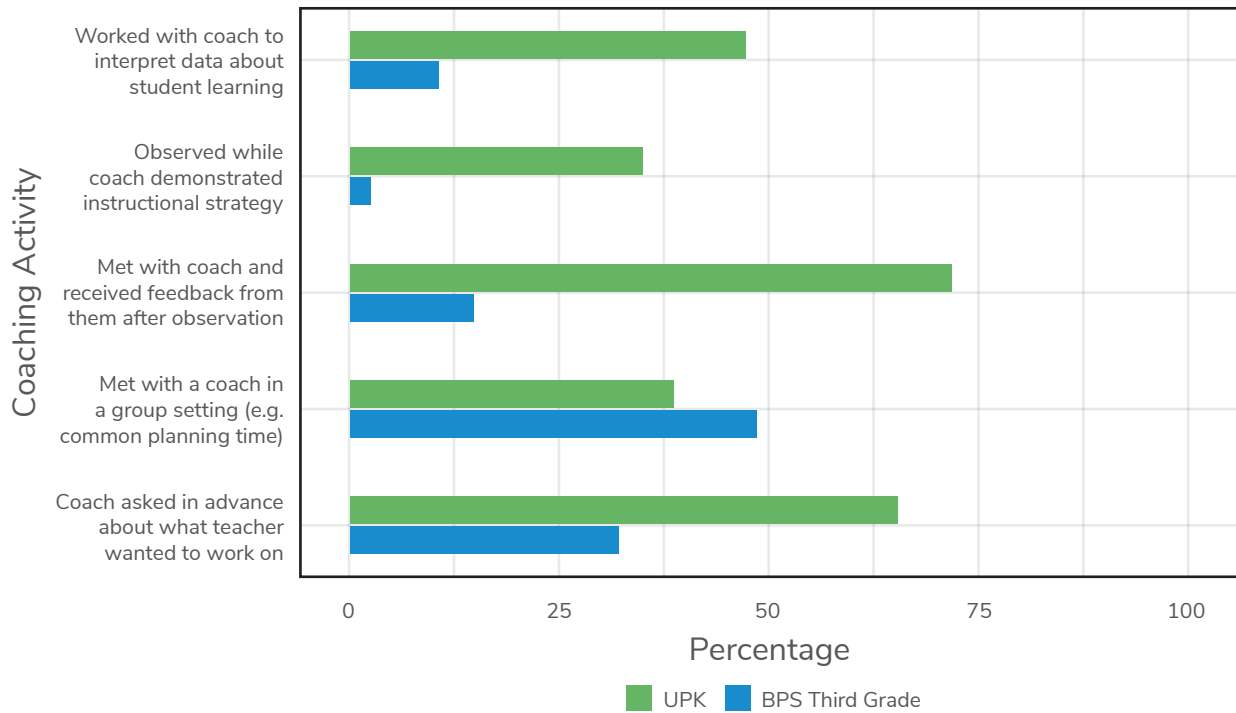
more robust supports put in place at the start of the pandemic, including help creating on-line lessons and content. For example, one third grade teacher noted, “I wish that BPS had provided virtual curriculums for teachers to use this year. It is really sad that we had to go searching and scrambling for something to use [...] In addition to that, many of us also had to try to prepare virtual materials for students from scratch, which took multiple hours for one subject!”

Figure 3: UPK Teacher Perceptions of Professional Development



Note: For this figure, the responses to online PD were conditional on respondents having done online PD. Thus, N = 14 for the last two statements, N = 37 for the second statement, and N = 36 for the first statement.

Figure 4: Frequency of Coaching Activities Used Most or Every Visit for UPK and BPS Third Grade Teachers



Note: N = 38 for UPK teachers who received coaching. N = 39 for BPS third grade teachers who received coaching.

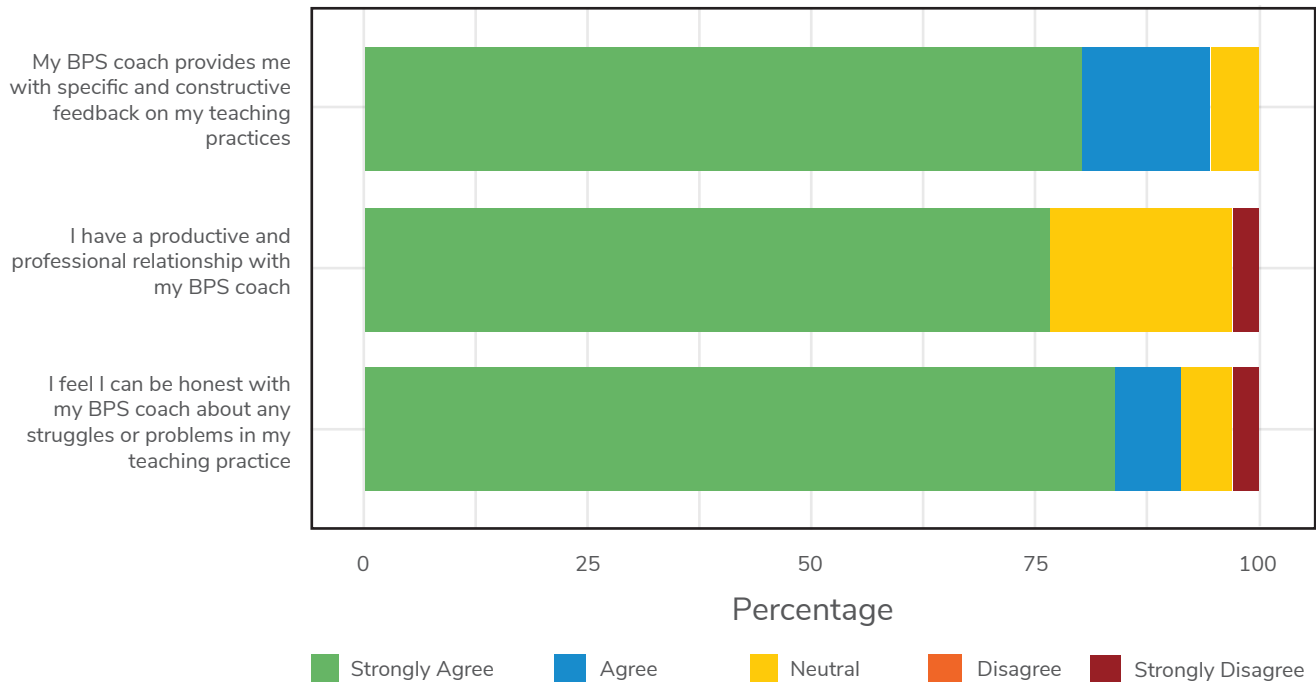
Coaching. All UPK teachers reported having a coach, compared to 74% of BPS third grade teachers. Across the UPK centers represented in our sample, data from logs completed by coaches show that lead teachers participated in an average of 11-12 coaching meetings throughout the school year, lasting an average of 55 minutes each. As displayed in Figure 4, the UPK teachers in our survey reported that coaches often asked in advance what a teacher wanted to focus on during the coaching session, and teachers frequently met with and received real-time feedback from coaches after an observation. As seen in Figure 5, UPK teachers rated their coaching experience very highly, with 95% of teachers agreeing or strongly agreeing that their coach provided them with constructive feedback on their teaching practices, and 92% agreeing or strongly agreeing that they could be honest with their coach about struggles and problems they were encountering.

In contrast, although the majority (74%) of BPS third grade teachers did report receiving or participating in

some coaching, these supports appeared less intensive than for UPK teachers. For example, only about 60% of the third grade teachers reported meeting with a coach during the year, with the majority of these teachers participating in four or fewer total coach meetings, lasting an average of 30 - 45 minutes each. As illustrated in Figure 4, a little less than half of the third grade teachers in the sample met with a coach in a group setting with other teachers. About a quarter participated in a coach observation and then received feedback afterward, and a little less than 20% of teachers were able to observe while a coach modeled an instructional strategy.

In our review of the open-ended survey responses, BPS third grade teachers did not identify district coaching as a key support that helped them weather the pandemic. Rather, they reported receiving higher levels of support from their principal, school leaders, or other teachers at their school.

Figure 5: UPK Teacher Perceptions of Coaching



Note: N = 37 for the first statement, N = 31 for the second statement, and N = 36 for the last statement.

Recommendations for Practice and Policy

These comparative findings from two sets of teachers at both ends of the early childhood spectrum can help inform other districts and educators on the types of supports that may be most effective for supporting teachers as the country continues to weather the challenges of the pandemic. Specifically, our findings show that:

- **Coaching matters.** Direct coaching supports may be a useful strategy for helping teachers adjust to pandemic-era teaching. The opportunity to use virtual visits and in-person visits can help teachers adjust to the many curveballs of pandemic teaching. Continuing to invest in coaching for all teachers of young children may help to make teaching practices more effective and strengthen implementation of curricula.
- **High-quality, relevant PD opportunities were well-received by teachers even during the pandemic.** Integrating regular, district-supported

PD into the academic year on the key topics that matter most to teachers can be a successful strategy for supporting high-quality learning now and in the future. Starting with assessing teachers' needs for support may be an effective strategy for designing PD sessions that are useful, relevant, and engaging for educators.

- **High-quality curriculum also makes teachers feel more supported.** High-quality curriculum materials are important tools for early childhood teachers that also have been shown to boost children's learning (Weiland & Yoshikawa, 2021).

As school districts continue the hard work of addressing student and teacher needs during this unprecedented period, it is critical to make smart investments that both address immediate needs and strengthen early learning in the long-term. Well-designed, robust, and relevant PD and coaching can support teachers and help to address these joint goals.

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