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The Promise of Summer as a Time for Teacher Professional Learning

Findings from a National Survey and Implications from the BellXcel Program

Helping teachers improve their instructional practice through high-quality professional learning opportunities is a key strategy for improving student academic and social and emotional outcomes. In spring 2020, the coronavirus disease 2019 (COVID-19) pandemic caused widespread school building closures and disruption of instruction and teacher professional learning (Béteille et al., 2020; “Coronavirus and Schools,” 2020; Hamilton et al., 2020). With school buildings closed, teachers did not have access to in-person professional learning activities while school was in session. Many teachers sought online professional learning activities over the summer to make up for lost time (Rauf, 2020).

Ensuring that teachers are able to access the professional learning they need to support students during the pandemic is reportedly an area of concern for principals: In a recent nationally representative survey, 50 percent of principals reported that supporting professional learning for teachers would be a higher priority when their buildings reopened than it had been prior to closing (Hamilton et al., 2020). Better understanding of when and how to offer professional learning opportunities so that teachers can maintain, improve, and acquire new skills is a clear area of need. In this report, we explore one way that schools and districts can maximize teacher learning: academic summer programs for students that also offer professional learning opportunities for teachers.

Most research on teacher professional learning has focused on discrete activities that take place during the school year (Kraft, Blazar, and Hogan, 2018). Professional learning opportunities for in-service K–12 teachers can take many forms, such as online or in-person workshops, collaboration with peers, coaching from mentors or administrators, and attending conferences. Schools and school districts offer teachers a variety of professional learning activities during the school year, and many teachers supplement these activities with experiences they seek on their own (Rotermund, DeRoche, and Ottem, 2017).

KEY FINDINGS

- Nationally, 99 percent of teachers participated in one or more professional learning activities over the summer and believed that they were relevant, helpful for improving instructional practice, and just as useful as other activities the teachers' schools and districts provided. However, opportunities to receive developmental feedback (i.e., feedback for the purpose of developing instructional skills) about instruction in the summer were uncommon.
- Teaching in an academic-focused summer program may provide teachers nationally with opportunities—such as coaching and observations—to receive developmental feedback about instruction and to practice and improve in certain classroom practices.
- According to teachers, BellXcel Summer (BXS), an academic-focused summer program for students that provides professional learning opportunities to its teachers, had a positive and supportive environment that supported their professional learning.
- BXS teachers reported that the absence of school-year constraints such as testing and curriculum pacing requirements made the use of some student-centered classroom practices easier during the summer than during the school year.
- BXS teachers were more likely than teachers nationally to report that their summer professional learning experiences helped them improve their use of student-centered practices during the school year.
- Academic summer programs may provide unique professional learning opportunities for teachers to practice and improve their use of student-centered classroom practices—particularly positive behavior management and promoting social and emotional learning for students. BXS provided useful insights into the features of academic summer programs that may facilitate teachers' professional learning, such as the absence of school-year constraints paired with positive and supportive teaching environments.

The research literature indicates that effective, high-quality professional learning opportunities for teachers may share a common set of features. In general, they are focused on the content of the subject matter; are clearly related to classroom activities; provide opportunities for active learning, practice, and ongoing feedback; involve participation of a group of teachers from the same school or grade; are supported by administrators; and are sustained over time (Coggshall et al., 2012; Archibald et al., 2011; Desimone, 2009; Garet et al., 2001; Wei et al., 2009; Yoon et al., 2007). However, as Hill and colleagues have pointed out, randomized controlled trials of professional learning programs with these characteristics have not always yielded the anticipated results, although the authors note that this could be due to poor study design (Hill, Beisiegel, and Jacob, 2013).

The types of professional learning experiences and contextual factors that are most likely to help teachers improve their instructional practice are not yet well understood. In one nationally representative

survey, teachers reported that feedback—especially feedback that is developmental or that is not evaluative (i.e., feedback from peers, mentors, or coaches with the intention of developing instructional skills rather than for formal evaluation)—helped them improve their instructional practice (Prado Tuma, Hamilton, and Tsai, 2018). Teachers responding to another recent national survey reported that collaboration with their colleagues contributed to their success in the classroom (Markow and Pieters, 2010). Contextual factors, such as lack of materials (e.g., hands-on learning materials, paper and pencils), time constraints (e.g., short class periods, insufficient planning time), the need to teach a district-mandated curriculum, and classroom management issues hindered teachers' ability to fully implement the skills and strategies they had learned in their classrooms (Buczynski and Hansen, 2010).

Most research on teacher professional learning has focused on discrete activities that take place during the school year, and little is known about

teachers’ experiences with professional learning during the summer. Teachers who are employed in summer programs that involve academic instruction, such as summer school, generally participate in professional learning prior to the start of the program (McCombs et al., 2019), and some school districts offer professional learning activities during the summer to supplement school-year opportunities (Augustine and Thompson, 2017). Teachers may also engage in professional learning opportunities, such as collaborating with colleagues or reading professional literature, over the summer outside a structured program.

The few studies that addressed summer professional learning focused on specific activities districts offer during the summer, professional learning offered as part of a summer instructional program for students, or short-term courses or workshops (e.g., Garner et al., 2020; Heck et al. 2019; Lynch et al., 2019). Little is known about the extent to which teachers nationally participate in any professional learning over the summer, the characteristics of the opportunities, and how teachers perceive them relative to school-year experiences. In particular, we have little insight into the extent to which summer professional learning addresses popular student-centered instructional strategies, such as use of data to inform instructional decisions, or integration of social and emotional competencies in academic instruction (Gross, Tuchman, and Patrick, 2018; Hamilton, Doss, and Steiner, 2019). In addition, we know of no national surveys that document the characteristics of teachers’ summer professional learning opportunities.¹

Abbreviations

ATP	American Teacher Panel
BXS	BellXcel Summer
COVID-19	coronavirus disease 2019
ELA	English language arts
PLC	professional learning community
PL	professional learning
RQ	research question
SEL	social and emotional learning

Purpose of This Report

In this report, we begin to fill the gap in knowledge about summer professional learning and explore some of the ways in which summer could be a productive time for teacher development. We present findings from the first nationally representative survey of K–12 teachers about their summer professional learning experiences. We fielded a survey to a randomly selected sample of teachers from RAND’s American Teacher Panel (ATP) in fall 2019.² The survey explored the types of professional learning activities in which teachers participated over the summer, the topics covered in the activities, and teachers’ perceptions of their summer learning experiences compared with their other school- or district-provided professional learning opportunities.

Summer programming for students is common but virtually unexplored as a context for teachers’ professional learning. To begin exploring this context, we examined teachers’ professional learning opportunities within one specific summer program model: BellXcel Summer (BXS). BXS is a model for summer programming that BellXcel created to provide academic instruction and enrichment for students and professional learning opportunities for its teachers.³ We describe the BXS model in greater detail in the “Results” section.

In this report, we describe teachers’ perceptions of their professional learning experiences in BXS, the extent to which these experiences influenced their school-year instruction, how BXS compared with other professional learning opportunities that their schools and districts provided, and the contextual factors that facilitated and hindered productive professional learning. We also compare teachers’ experiences in the BXS program with those of teachers in academic summer programs nationally. Our analysis of BXS is descriptive: We focused on understanding specific components of the BXS model for professional learning (e.g., in-person training, instructional coaching, instructional modules and resources) and teachers’ perceptions of their experiences; we did not evaluate the quality of the model.

We address the following broad research questions (RQs) in this report:

1. **National context for summer professional learning:** To what extent do teachers nationally participate in professional learning during the summer; what do these activities entail; and what are teachers' perceptions of these activities?
2. **Teacher professional learning in BXS:** What are BXS teachers' perceptions of their professional learning experiences?
3. **BXS in a national context:** How do BXS teachers' perceptions of their summer professional learning experiences compare with those of teachers across the United States?

In our surveys of BXS and ATP teachers, we defined professional learning broadly, as

opportunities to incorporate new resources or strategies into your practice, help you develop as an educator, and practice instructional strategies. Professional learning opportunities can come in many forms, including seminars, professional development sessions, workshops, formal and informal collaboration with colleagues, professional learning communities (PLCs), instructional coaching, mentoring, feedback from an administrator or supervisor, and others.

Exploring the possibilities of utilizing summer as a time for teacher professional learning will be imperative following the COVID-19 crisis, which has disrupted opportunities for educators' school-year professional learning. The findings in this report can help district and school leaders, professional learning providers, and other support providers understand teachers' perceptions of their summer professional learning opportunities and identify some of the contextual conditions of academic-focused summer programs that could support teacher professional learning.

In the next section, we briefly discuss our data sources and methods. The separate technical appendixes (Steiner, Stelitano, et al., 2021) describe the data sources and methods in more detail. Following the description of data and methods, we discuss the ATP survey results, which we present first to provide a national context for teachers' summer professional learning. Next, we briefly describe the BXS model

and discuss the results from our exploration of the BXS approach to teacher professional learning. We then compare BXS teachers' perceptions of their summer professional learning experiences with those of teachers across the United States. We conclude by discussing implications that could be useful for policymakers and state and district leaders to consider as they weigh options for teacher professional learning during the COVID-19 recovery.

Data Sources and Methods

To address RQ1, we fielded a survey exploring summer professional learning to a nationally representative sample of U.S. teachers. To address RQ2, we conducted a descriptive analysis of the BXS program model from fall 2018 through spring 2020. We drew on the national survey and our analysis of BXS to address RQ3. In this section, we describe the data sources, samples, and analytic methods used to study teachers' summer professional learning opportunities nationally and during BXS. The technical appendixes (Steiner, Stelitano, et al., 2021) describe our data sources, response rates, samples, and analytic approach in more detail.

National Context: American Teacher Panel Survey

To address RQ1, we administered a web-based survey to a sample of 1,200 teachers randomly selected from RAND's ATP in October and November 2019. ATP members were recruited using probabilistic sampling methods and the data were weighted to represent teachers nationally. Our sample was designed to be of sufficient size to facilitate nationally representative analyses and analyses of prevalent subgroups at the national level. A total of 645 teachers completed the survey, for a response rate of 54 percent. The survey asked teachers questions about their professional learning opportunities in summer 2019, other professional learning opportunities provided by their schools or districts, and the supports and perceptions of working conditions and instructional resources. Hereafter, we refer to this as the "ATP survey" to

clearly distinguish the sample of this survey from the BXS summer and fall surveys described below.

We compared subsamples of ATP respondents who were employed in an academic-focused summer program with those who participated in summer professional learning but were not employed in any kind of summer program. The subsamples of ATP teachers we compared were demographically different in terms of race/ethnicity. We performed analyses to adjust for this difference and to test for statistically significant differences between the adjusted samples. When we discuss these comparisons, we report adjusted results.

BellXcel Summer

To study teachers' professional learning opportunities through BXS (RQ2) and to compare BXS teachers' experiences with those of teachers nationally (RQ3), we drew from both survey and qualitative data sources.

BellXcel Surveys

BellXcel fielded two web-based surveys to BXS site staff, which we utilized for this study. The first survey took place in summer 2019 during the last few weeks of the BXS program; we refer to this as the *BXS summer survey*. The second survey took place in October and November of 2019; we refer to this as the *BXS fall survey*. Summer survey questions focused on the types of professional learning opportunities teachers participated in during BXS, the extent to which they found these opportunities helpful for improving instruction, perceptions of training and support activities, use of instructional strategies BXS emphasized, and perceptions of summer working conditions and instructional resources. The BXS fall survey followed up on these themes, asked teachers about the professional learning opportunities schools and districts provided, prompted teachers to consider the extent to which their use of key instructional practices during the school year was influenced by their BXS experience, and asked about their school-year working conditions and instructional resources. The surveys were administered to all BXS site staff, including teachers, program managers, and

instructional coaches. Our survey analyses rely on the subsample of 396 teachers who completed both the summer and fall surveys.

We compared the subsample of BXS teachers who completed both summer and fall surveys to the subsample of ATP teachers who taught in academic-focused summer programs. To avoid overlap between the ATP and BXS samples, the ATP survey included a question to identify any respondents who taught in a summer program sponsored by or affiliated with BellXcel. These BXS and ATP subsamples were different on some key demographic characteristics (e.g., gender, race/ethnicity). We performed regressions to adjust for the richest set of demographic characteristics possible and to test for statistically significant differences between the adjusted samples.⁴ When we discuss these comparisons, we report adjusted results. In our analysis, we examined the survey data for substantive, meaningful differences and similarities and for statistical significance.

BellXcel Qualitative Data

To complement and deepen our interpretation of survey data, we collected qualitative data including interviews with BellXcel staff members, reviewed BXS professional learning materials, and conducted in-person visits at three BXS program sites. In winter 2019, we interviewed key BellXcel staff who were responsible for overseeing the BXS model. The interviews addressed implementation of the BXS model, teacher professional learning at program sites, and design of teachers' professional learning materials. In winter and spring 2019, we reviewed the professional learning materials BellXcel offered to BXS partner sites, including teacher handbooks, slides used in training sessions, prerecorded training webinars, instructional coaching checklists, lesson plan guidance and templates for teachers, and sample classroom materials for teachers (e.g., signs indicating classroom expectations). We reviewed these materials to better understand the BXS model for teacher professional learning.

We conducted site visits to three BXS program sites in summer 2019. We purposively selected these sites to represent a range of BXS partner programs

while being consistent in some attributes (e.g., history of successful model implementation) and varying across other key characteristics (e.g., partnership model, program size) that we hypothesized would lead to variation in teachers' learning opportunities (Yin, 2017). We visited each site once during the site-specific teacher training at the beginning of the program and a second time several weeks later, once the program was underway.

During both visits across our three sites, we conducted a focus group with three to five teachers (for a total of 17) and interviewed the instructional coach and site program manager. At the first visit, we observed approximately a day and a half of staff training sessions in each site. At the second visit, we observed one coaching session and two to three periods of classroom instruction at each site (see Steiner, Stelitano, et al., 2021, Table B.1). We also conducted follow-up telephone interviews with select site teachers the following school year in winter 2020; six teachers, at least one from each site, participated. The BellXcel staff interviews and BXS site case studies provided in-depth information about BXS implementation and teachers' perceptions of their professional learning opportunities that lend depth and context to the survey data.

We performed thematic qualitative coding to synthesize major themes regarding BXS implementation, teachers' perceptions of professional learning opportunities, and teachers' use of BXS key classroom practices (we describe the BXS key classroom practices later in this report) and created tables to compare themes across sites. In our analysis of the BXS program, we complemented the survey data with insights from the interviews and focus groups. When analyzing the BXS model, we relied primarily on BXS survey data to derive major findings because this source is the most representative of BXS teachers' attitudes and perceptions. We used the qualitative data to complement and add deeper insights to survey themes.

Limitations

The survey, focus group, and interview data provide rich information about teachers' perceptions of and experiences with summer professional learning but

are self-reported and therefore limited by various biases, such as social desirability. Our case study data were collected from three purposefully selected sites and, while illustrative, should not be generalized to all BXS sites. The analyses of survey data presented in this report are descriptive, and we are not able to make causal statements attributing differences in survey responses to participation in the BXS program.

Our comparison of the BXS program to academic-focused summer programs nationally is also limited in several ways. Although the BXS program appears to be similar to most of the academic summer programs in which teachers nationally were employed on some dimensions, such as academic focus, duration of the program, and ages of students served, there were several differences (e.g., emphasis on enrichment activities, program length). In addition, we lack information about the summer programs in which teachers in the national sample were employed. For example, we do not know much about the broader context of the academic summer programs where teachers nationally were employed, such as the demographic characteristics of the students served, whether student attendance was mandatory, or whether teachers' participation in professional learning opportunities was mandatory.

As we expected, BXS teachers were more diverse and less experienced than teachers in academic summer programs nationally. Although we adjusted for as many of these differences as we could when comparing the two samples, we were not able to adjust for differences in years of teaching experience because of data sparsity. It is possible that the differences in teaching experience between the two groups could be driving some of the differences we observed. In addition, it is possible that unobserved differences between the samples could be driving the differences in responses. Despite these limitations, the findings in this report contribute to increased understanding of teachers' perceptions of summer professional learning experiences and allow us to examine some contextual conditions that could enable summer to be a productive time for teacher professional learning. The separate technical appendixes (Steiner, Stelitano, et al., 2021) discuss the limitations in more detail.

Results

The National Context for Summer Professional Learning

In this subsection, we address RQ1: To what extent do teachers nationally participate in professional learning during the summer; what do those activities entail; and what are teachers' perceptions of those activities?

Here, we describe results from the full ATP sample and compare survey results from subgroups of teachers who reported employment in academic-focused summer programs with those for teachers who reported participating in some professional learning activities but did not report employment in summer programs. We present these subgroup results to explore whether U.S. teachers who were employed in an academic summer program similar to BXS held different perceptions of their professional learning experiences from those of teachers who participated in professional learning activities during the summer but were not involved in such a program.

Nationally, nearly all teachers reported participating in at least one type of professional learning

activity in summer 2019. Ninety-nine percent of teachers nationally reported that they participated in at least one professional learning activity in summer 2019 (see Steiner, Stelitano, et al., 2021, Table C.4). Some activities, such as reading books or articles related to education, collaborating with colleagues to plan for the upcoming year, and attending in-person sessions, were more widely reported than others (see Table 1 and Steiner, Stelitano, et al., 2021, Table C.3). Participation in such activities as attending courses or seminars, receiving feedback from an administrator or coach, and mentoring or receiving mentoring were less common and were reported by 30 to 44 percent of teachers, depending on the activity. The most frequently reported number of professional learning activities during summer 2019 was five, reported by 17 percent of teachers. About 60 percent of teachers reported participating in one to five professional learning activities in summer 2019 (see Steiner, Stelitano, et al., 2021, Table C.4).

Teachers' professional learning experiences reportedly included a mix of voluntary activities and activities required by their districts. Although the survey question did not explicitly direct teachers to include (or exclude) activities they attended during

TABLE 1
Teachers' Participation in Professional Learning Activities in Summer 2019

Professional Learning Activity	Percentage of Teachers Nationally Who Responded	
	No	Yes
Read books or articles related to education	14	86
Collaborated with colleagues to plan for the upcoming school year	19	81
Participated in PLCs	40	60
Attended in-person professional learning	40	60
Took courses or seminars, either online or in person	56	44
Received feedback from an administrator or instructional coach	64	36
Wrote curriculum	68	32
Attended a conference	68	32
Mentored another colleague or received mentoring from a colleague	69	30
Wrote assessments	69	30

NOTES: Survey question text: In summer of 2019 did you participate in any of the following professional learning activities? Response options were "Yes," "No," and "Don't know." Very few respondents chose "Don't know"; this table does not include such responses, but they are provided in Steiner, Stelitano, et al., 2021, Table C.3. *N* = 645.

in-service professional learning days prior to the start of the school year, it is possible that some teachers included such activities in their response. Majorities of teachers reported that their districts required participation in in-person professional learning, PLCs, and receiving feedback from an administrator or coach over the summer. Such activities as reading books or articles related to education and engaging in informal mentoring were generally not required (see Steiner, Stelitano, et al., 2021, Table C.5).

About one-quarter of teachers nationally were employed in a summer program in 2019.

Twenty-three percent of teachers nationally reported employment in a summer program in 2019. Most of the teachers employed in summer programs (70 percent⁵) were employed in programs that focused primarily on instruction in academic content (e.g., mathematics, English language arts [ELA]) but that also may have included enrichment or recreational activities, such as field trips or athletics. Few teachers reported working in specialty summer programs (e.g., soccer camp, Girl or Boy Scouts) or multipurpose programs (e.g., Boys & Girls Clubs) that did not focus on instruction in academic content (see Steiner, Stelitano, et al., 2021, Table C.2).⁶ Although our data do not address this specifically, the teachers who reported employment in academic-focused programs

might work in district summer school programs. Although most teachers who were employed in summer programs worked in programs with an academic focus, the percentage of teachers nationally who were employed in an academic summer program was small—only 16 percent.

The summer programs in which teachers were employed varied in duration, but most were between two to four weeks for three to five days per week. A majority of teachers reported that their programs served students ages 5–13 (see Steiner, Stelitano, et al., 2021, Tables C.7, C.8, and C.11). Seventy percent of the teachers who were employed in academic summer programs reported that their programs included instruction in mathematics and/or ELA. Fifty-seven percent reported that the programs provided instruction in other academic subjects, such as science or social studies (see Steiner, Stelitano, et al., 2021, Table C.12).

Teachers nationally perceived that their summer professional learning activities were high quality and were helpful for improving their instruction in the following school year. Nationally, large majorities of teachers—between 79 and 93 percent (see Steiner, Stelitano, et al., 2021, Table C.17)—regardless of their employment in a summer program, reported that their summer professional learning activities were consistent with best practices in professional learning (i.e., the content was clear and made sense, that there was a clear connection between different topics and sessions, that they included opportunities for reflection and practice, and that they were relevant to the teachers’ instruction).

Furthermore, among teachers who reported participating in a given activity (e.g., coaching sessions), large majorities (between 86 and 96 percent, depending on the activity) agreed that it was somewhat or very helpful for improving their instruction in the following school year (see Table 2 and Steiner, Stelitano, et al., 2021, Table C.18). As shown in Table 2, majorities of teachers who participated in these professional learning activities found them to be at least somewhat helpful. More than 40 percent of teachers who participated in collaborating with colleagues on instruction, one-on-one coaching, and opportunities to observe other educators’ classrooms found them to be very helpful. In contrast, 24 percent

Teachers nationally perceived that their summer professional learning activities were high quality and were helpful for improving their instruction in the following school year.

TABLE 2

Perceived Helpfulness of Summer Professional Learning Activities for Improving School-Year Instruction Among U.S. Teachers Who Participated in Them

Professional Learning Activity (n)	Percentage of Teachers Nationally Who Responded			
	Received PL	Found PL Unhelpful	Found PL Somewhat Helpful	Found PL Very Helpful
Collaborating on instruction with my colleagues (e.g., common planning time, PLCs) (480)	75	4	47	49
Opportunities to observe other educators' classrooms (143)	23	9	50	41
One-on-one coaching sessions (108)	17	7	53	40
Conferences or convenings (254)	40	7	54	38
Mentoring from a peer or colleague (165)	26	4	58	38
Group coaching sessions with my peers (185)	29	7	57	36
Online courses or training sessions (245)	38	14	50	36
Analyzing student work with my colleagues (233)	37	7	58	35
Small-group training or in-service sessions held in person (349)	55	8	57	35
Observations of my classroom performed by a coach and followed by feedback (145)	23	15	53	32
Observations of my classroom performed by an administrator and followed by feedback (205)	32	16	54	30
Large-group training or in-service sessions held in person (378)	59	17	60	24

NOTES: Original question text: "Please indicate whether you have received each of the following kinds of professional learning opportunities during summer 2019, and the extent to which you found them helpful for improving your instruction this school year (2019–20)." Response options: "I did not receive this"; "I received it and found it unhelpful"; "I received it and found it somewhat helpful"; and "I received it and found it very helpful." PL = professional learning activities. Percentages of those who found the PL unhelpful or helpful were calculated only for respondents who reported receiving the activity. Some rows may not sum to 100 percent due to rounding. See Steiner, Stelitano, et al., 2021, Table C.18 for the complete results for this question. Received PL N = 637–638.

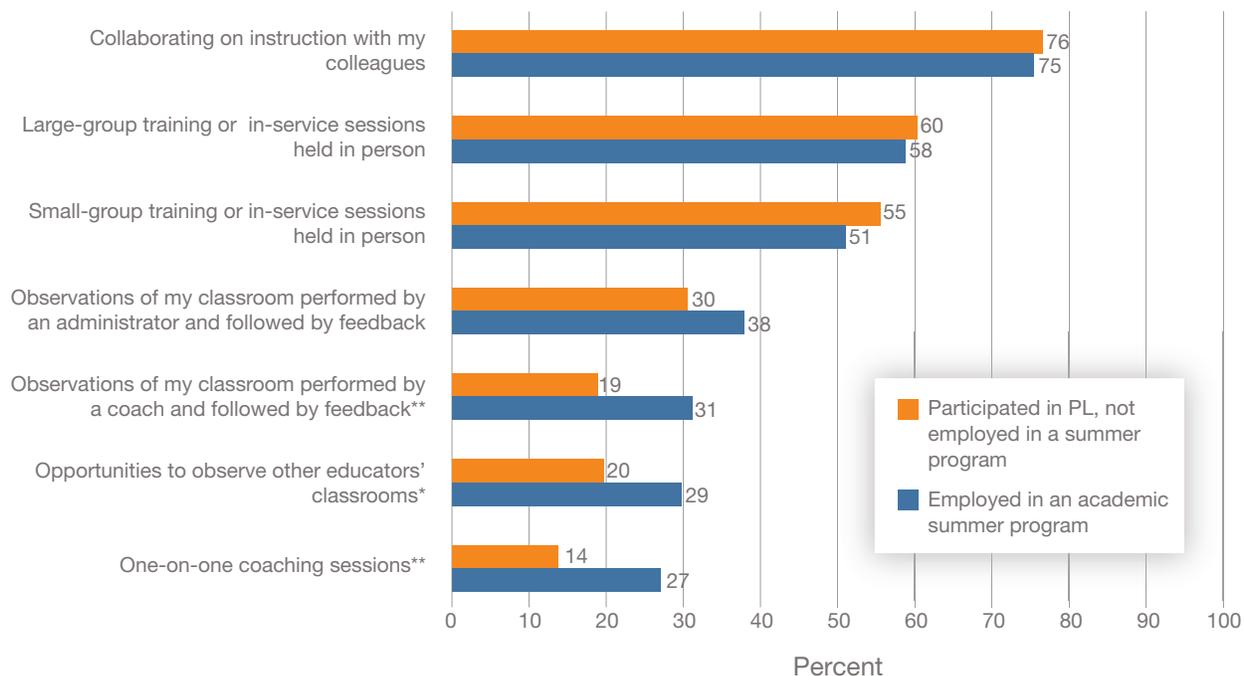
of teachers who participated in large group training or in-service sessions perceived them to be very helpful. Teachers who participated in the summer professional learning opportunities listed in Table 2 found them to be of comparable quality and similarly helpful for improving the teachers' school year instruction to other professional learning their school or district provided (see Steiner, Stelitano, et al., 2021, Tables C.23 and C.24).

Summer professional learning activities that provided opportunities for feedback were rare among teachers nationally but were more common in academic-focused summer programs. Seventeen to 37 percent of teachers nationally reported receiving professional learning opportunities that included opportunities for feedback (e.g., observations performed by an administrator or coach and followed by feedback; see Table 2 and Steiner, Stelitano, et al.,

2021, Table C.18). When we looked at the subsample of teachers who were employed in a summer program, participation in several activities that could involve feedback was higher among teachers who were employed in academic summer programs than it was among teachers who participated in summer professional learning but were not employed in a summer program. Teachers in both groups were just as likely to report collaborating on instruction with colleagues and participating in small- or large-group in-person training sessions, as shown in Figure 1 (see Steiner, Stelitano, et al., 2021, Table E.2). Our data do not reveal why these differences might exist, but one possibility is that academic summer programs involve classroom instruction and thus provide opportunities for observations and feedback about instruction.

FIGURE 1

Percentages of Teachers Reporting Participation in Summer Professional Learning Activities in Summer 2019



NOTES: Original question text: “Please indicate whether you have received each of the following kinds of professional learning opportunities *during summer 2019*, and the extent to which you found them helpful for improving your instruction *this school year (2019–20)*.” Response options: “I did not receive this”; “I received it and found it unhelpful”; “I received it and found it somewhat helpful”; and “I received it and found it very helpful.” Responses of “I received it and found it unhelpful”; “I received it and found it somewhat helpful”; and “I received it and found it very helpful” were summed to find the percentage of teachers who reported participating in each activity. Comparisons were adjusted to account for differences between the two groups in teacher race. See Steiner, Stelitano, et al., 2021, Table E.2 for complete results. Summer program teachers $N = 95$; non-summer program teachers $N = 450$. Asterisks indicate statistically significant differences in percentages: * $p < 0.05$; ** $p < 0.01$.

Teachers employed in academic summer programs reported their summer professional learning helped them improve in certain classroom practices during the school year. We asked teachers a series of questions to explore their perceptions about the influence summer professional learning experiences had had on their school-year use of various common classroom practices. These classroom practices included collaboration among students, using data for instructional decisionmaking, promoting students’ social and emotional skills, positive behavior management, checking for understanding, promoting critical thinking, and collaborative teaching. Teachers who were employed in academic summer programs were more likely to report that summer professional learning activities addressed some of these practices than were teachers who participated

in summer professional learning but were not employed in summer programs. The differences were largest for using data to inform instruction, promoting students’ social and emotional skills, positive behavior management, and collaborative teaching (see Steiner, Stelitano, et al., 2021, Table E.3). In general, teachers in both groups felt equally prepared to use these practices in school-year instruction (see Steiner, Stelitano, et al., 2021, Table E.4).

Compared with teachers who were not employed in an academic summer program, those who were reported increased use of several of these practices during the school year because of summer professional learning experiences (see Steiner, Stelitano, et al., 2021, Table E.5). It is noteworthy that more teachers employed in academic summer programs reported that summer professional learning helped

improve their school-year practice in these instructional strategies than did teachers who were not employed in such programs (see Steiner, Stelitano, et al., 2021, Table E.6). Although not all these differences are statistically significant, most are substantively large (at least 10 percentage points). The survey data do not allow us to determine why this is the case, but one possibility is that there is something different about the quality of the professional learning teachers' districts or schools provided that may contribute to participants' positive perceptions. Another possibility is that the teachers employed in academic summer programs were different in some way from those who were not.

Teacher Professional Learning in BXS

In this subsection, we address RQ2: What are BXS teachers' perceptions of their professional learning experiences?

As the national survey findings suggest, summer may be a promising time for teacher professional learning. In this section, we report findings related to BXS teachers' perceptions of summer professional learning experiences, drawing from qualitative data collected from our BXS case study sites and surveys of BXS teachers. When we discuss interview data, we use terms such as *many* and *most* to refer to more than half of interview or focus group respondents in the applicable group (e.g., BellXcel staff, BXS site leaders, or BXS teachers) and use *several* or *some* to refer to less than half. We note instances where findings based on the qualitative data are applicable only in specific case study sites. When we report specific percentages, these data come from survey results from the subsample of BXS teachers who responded to both the summer and fall surveys.

We begin with a brief overview of the BXS program model, based on our interviews with BellXcel staff and review of BXS professional learning materials. We then present results from our exploration of teachers' perceptions of their BXS professional learning experiences.

The BXS Model

One of the programs BellXcel offers is BXS, an academic-focused summer program that also emphasizes student social and emotional development and community engagement for high-need students in grades Pre-K–8. BellXcel partners with schools and youth organizations to license the model, and partners can choose to implement BXS to create new or enhance existing summer programming. In summer 2019, BXS programs operated in over 150 sites nationally. The model is designed to mitigate summer learning loss in mathematics and ELA, build social and emotional competencies, and provide enrichment activities—including STEAM; fine arts; and educational nonacademic experiences, such as trips to museums, sports, arts, and other cultural activities.⁷ In summer 2020, after the period of our research, BellXcel created a new model called BellXcel Remote to accommodate remote, in-person, and hybrid implementation in response to COVID-19 (BellXcel, 2020).

BXS provides partner sites with the tools and resources to implement and assess the program model. The resources provided to partner sites include tools and materials to hire and train program managers, instructional coaches, and teachers at partner sites; curricula and other classroom resources; and ongoing technical assistance and guidance for implementing the model. While BXS provides resources and guidance, it is ultimately up to partner sites to implement the model as they see fit according to their unique contexts and needs. BXS partner sites are supported by a BXS staff member throughout the summer, and BXS team members conduct quality assurance visits to sites throughout the summer. After these visits, BXS provides guidance as to how partner sites might improve model implementation.

Sites throughout the country implement the program through one of two partnership types: either community-based organization partnerships or school district partnerships. The length of the program varies slightly by site but generally lasts four to six weeks for at least six hours per day, five days a week, with academic instruction typically in the morning and enrichment activities in the afternoon.

Students receive daily tiered mathematics and ELA instruction in 90-minute-long class periods,⁸ as well as multiple enrichment opportunities that vary by site depending on students' interests, ranging from educationally focused field trips (e.g., to museums) to courses in the arts and athletics (e.g. drama, cycling, cooking).

BXS partner sites generally recruit and hire summer staff (e.g., teachers, assistants, instructional coaches, and program managers), often through relationships with nearby elementary and middle schools, at the beginning of the summer. The BXS model provides program sites with some basic guidance for recruiting staff, including using a variety of sources to help attract qualified candidates, such as targeted outreach to community organizations and partnerships with local schools. Beyond this basic guidance, sites are given flexibility to conduct recruiting and hiring in a way that best meets site needs. Academic teachers are generally certified teachers and hold a bachelor's degree. Although some assistant teachers may have teaching certifications and hold bachelor's degrees, they are not required to do so. Staff are often hired locally, from the communities in which the sites are located.

BXS Key Classroom Practices

Teachers hired to work for BXS are encouraged to emphasize six classroom practices that BXS considers to be key for student success: social and emotional learning (SEL), collaborative teaching, data-driven instruction, positive behavior management, differentiated instruction, and center-based learning.⁹ Although there is no consensus in the literature about what strategies and practices constitute student-centered learning, it generally consists of practices that support students' academic and social and emotional development and provides students with customized supports to enable their deep engagement in challenging learning opportunities (Steiner, Kaufman, et al., 2020). The BXS approach to summer instruction, therefore, is generally consistent with student-centered practices.

BXS employs a *coteaching* model in which two teachers—an *academic teacher* and an *assistant teacher*—teach each academic class. The academic teacher is the lead teacher and is responsible for

BXS Key Classroom Practices

- Promoting students' social and emotional learning
- Collaborative teaching
- Data-driven instruction
- Positive behavior management
- Differentiated instruction
- Center-based learning

planning lessons, assessing student work, and directing the activities of the assistant teacher. The assistant teacher collaborates with the academic teacher to implement lesson plans, provide feedback to students, supervise group work, and work individually with students as needed.

Finally, to enable data-driven instruction, all students at BXS sites take the Star assessment (Renaissance Learning, 2020) at the beginning of the program. The assessment serves as a diagnostic that allows teachers to understand students' learning strengths and needs. The Star assessment is administered again at the end of the program to gauge students' learning growth. Program managers and instructional coaches are responsible for administering the Star assessment at local BXS program sites.

Teacher Professional Learning in the BXS Model

Another key dimension of BXS is the extent of professional learning available to teachers. In summer 2019, in-person sessions for all teaching staff took place in the one to two weeks before the program began and typically lasted from a half day to two days. BXS partner sites also have access to remote training webinars and targeted sessions provided by BellXcel staff. BXS provides partner sites with teacher training materials and sample agendas for these sessions. Partner sites may elect to have BellXcel staff lead training for their teachers or to facilitate training on their own using the modules and materials included with BXS, which train summer teachers in the BXS model and key classroom practices. While the BXS model does not prescribe a specific format for these trainings, our three case study sites used a whole group format.

While the support BellXcel provides to summer sites and teachers is continually evolving, it

included, as of summer 2019, curricula in math and ELA—developed in collaboration with reputable curriculum providers, such as Scholastic—that included instructional materials and lesson plans, templates for classroom activities, and a positive behavior-management plan. BXS teachers also had access to online training materials—typically in the form of PowerPoint slides or recorded webinars—prior to in-person sessions.

Teachers at BXS sites have access to professional learning throughout the summer. Instructional coaches and/or program administrators are expected to regularly observe teachers' classrooms, review their lesson plans, and provide feedback. Feedback about instruction is developmental and intended to support improvement of teachers' instructional skills. Instructional coaches use templates focused on the six BXS key classroom practices to guide observations and feedback conversations. Teachers are encouraged to experiment with the BXS classroom practices—a process BXS calls *active experimentation*.

BXS Teachers' Perceptions of Professional Learning Experiences

BXS provided an opportunity for teachers to practice instructional strategies also emphasized in their school- and district-provided professional learning. We compared BXS teachers' survey responses about summer professional learning experiences with responses about school and district professional learning experiences. Depending on the strategy, between 70 and 85 percent of BXS teachers surveyed reported that their BXS summer professional learning covered BXS's key classroom practices (described earlier) and that they felt prepared to use them. In particular, nearly all teachers reported that BXS professional learning covered strategies to develop students' social and emotional skills and support positive student behavior, and large majorities of teachers felt prepared to use each of these practices (see Steiner, Stelitano, et al., 2021, Table F.2). Similar proportions of BXS teachers (67–85 percent, depending on the activity) reported that professional learning activities schools and districts provided also covered the BXS key classroom practices and that they felt prepared to use them (see Steiner, Stelitano,

et al., 2021, Table G.4), suggesting an overlap in classroom practices emphasized by BXS and teachers' school or district-provided professional learning. Overall, teachers responded similarly regarding the classroom practices covered, their preparedness to use those practices, and the extent to which participating in professional learning activities improved the teachers' practice when comparing their BXS summer learning and general school and district training experiences.

BXS teachers' focus group comments reinforced that they were already familiar with the BXS key classroom practices from previous teaching and professional learning experiences. For example, teachers at one case study site reported that their district strongly emphasized strategies to improve students' social and emotional development and that such practices were “ingrained” in their teaching prior to joining BXS. Case study teachers also frequently mentioned that most of the other BXS key practices were commonplace in their schools and districts.

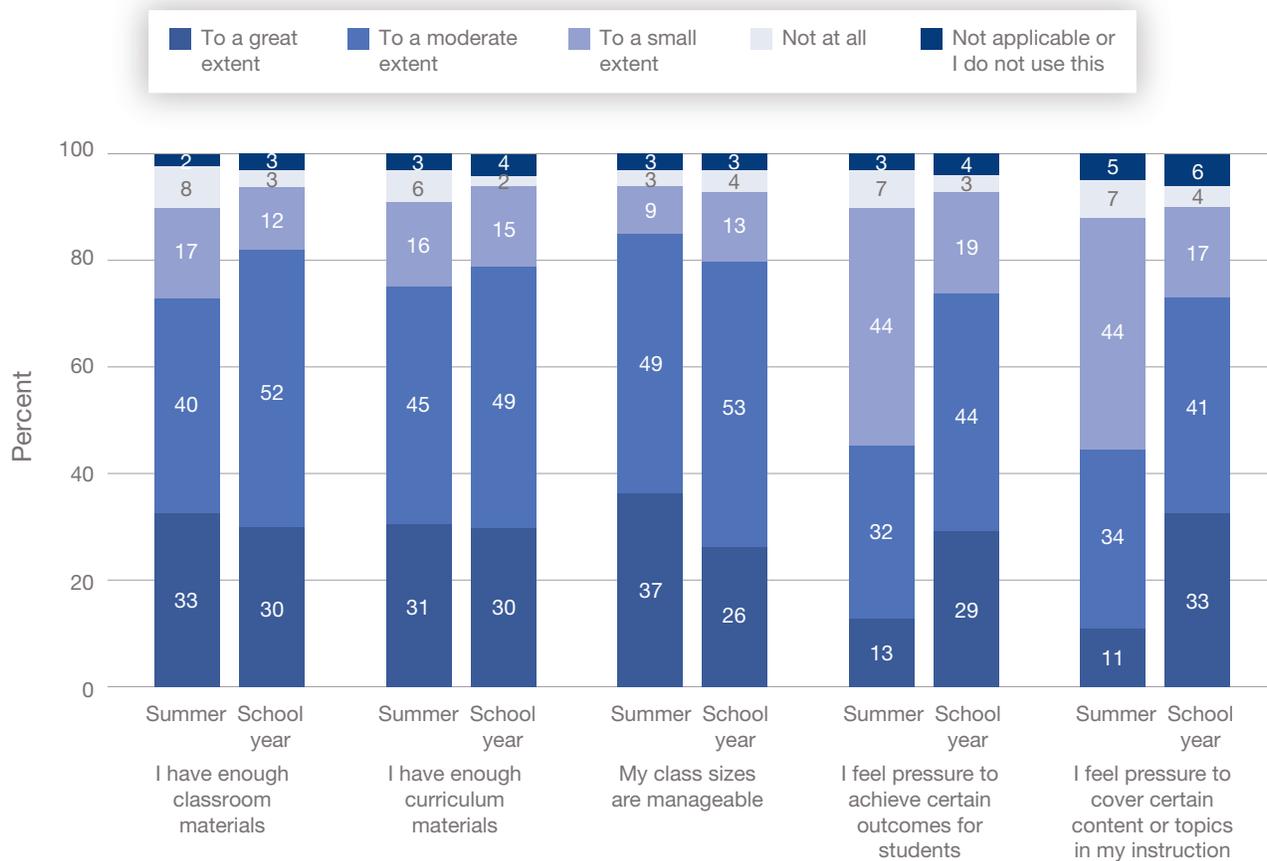
Nearly all teachers agreed that their BXS sites were supportive and positive environments for teaching. The survey and case study data indicate that BXS teachers perceived the environment to be positive and supportive. Several case study teachers suggested that the voluntary nature of summer programs, such as BXS, contributed to a positive environment and conveyed a sense that students and staff alike wanted to be there. A large majority of surveyed BXS teachers agreed that teachers supported each other to improve student learning (93 percent) and that BXS site leaders were highly supportive of teachers (93 percent) (see Steiner, Stelitano, et al., 2021, Table F.7). Survey responses also indicated that teachers perceived their BXS professional learning experiences positively. Specifically, approximately 80 percent of teachers agreed that their experiences were coherent and cohesive, included opportunities to reflect on their instruction and practice new skills or instructional strategies, and were relevant to their summer instruction (see Steiner, Stelitano, et al., 2021, Table F.4).

In addition, most surveyed teachers agreed that they had enough resources, such as classroom and curricular materials (e.g., paper, pencils, books, or lesson plans), and that their BXS class sizes were

manageable (see Figure 2 and Steiner, Stelitano, et al., 2021, Table G.3). In addition, BellXcel staff who participated in our interviews reported that class periods were 90 minutes long and that there were always at least two teachers (BellXcel referred to them as *coteachers*) in classrooms. All the case study classrooms we observed had at least two teachers, and some had three. An instructional coach from one case study site reflected on how the BXS model provided teachers at their site with more access to resources and support from coaches and administrators than they received during the school year:

I think they [teachers] have much more support in [BXS] than they do in the regular school year. It's a smaller setting, so an instructional coach is able to attend to the needs of the teachers a lot faster. If a teacher needs supplies, we can get that turned around really quickly. We also have more funds in [BXS] than you do during the school year. So, [during the school year] a teacher can't just go to someone and say, "I need folders" or "I need this for a lesson." [Obtaining supplies] all falls on the teacher during the school year. I think just having the opportunity and the privilege to

FIGURE 2
BXS Teachers' Perceptions of their Summer and School-Year Environments and Resources



NOTES: Survey question text: "Please indicate your level of agreement with each of the following statements about your summer 2019 BellXcel program?" and "Please indicate your level of agreement with each of the following statements about your experience this school year (2019–20)." Response options for both questions were "Not applicable to my role"; "Strongly disagree"; "Disagree"; "Agree"; and "Strongly agree." Responses reported are from the 396 BXS teachers who responded to the summer and fall surveys. Some columns may not sum to 100 percent due to rounding. BXS experience $N = 393$ –396; School-year experience $N = 392$ –394.

get what you need to teach your lessons—and it doesn't come out of your pocket—makes a huge difference in [BXS]. We're [instructional coaches] available, and we're present. We are constantly in and out of classrooms interacting with teachers, and that's different than during the school year. I think the more visible and more present your admin and instructional support are, teachers feel much more supported.

Teachers across case study sites echoed this sentiment and described how the easy availability of resources and materials and close contact with program administrators and coaches made them feel valued and supported as teachers.

When asked how their BXS classroom compared with their school-year classroom, nearly all the case study teachers, program managers, and instructional coaches we interviewed described the BXS environment as more positive than their school-year environment. Teachers said that having enough classroom and curricular materials, coteachers, longer class periods, and smaller class sizes—coupled with the absence of school-year requirements for high-stakes testing, fewer tests, and less pressure to cover specific standards—were all reasons they held such a positive view of BXS. The survey results reinforced the experiences of our case study interviewees. Surveyed teachers perceived BXS to be a lower-pressure environment than the school year. Just under half of teachers agreed that they felt pressure to achieve certain outcomes for BXS students, while almost three-quarters of teachers felt such pressure during the school year. Similarly, just over 40 percent of teachers agreed that they felt pressure to cover certain topics in their summer instruction, compared to just over 70 percent during the school year (see Figure 2 and Steiner, Stelitano, et al., 2021, Tables G.3 and G.6).

Most case study teachers believed that the lack of school-year constraints during BXS supported active experimentation and enabled them to use student-centered classroom practices more easily than during the school year. When asked about the ways in which their classroom practice during BXS compared with their school-year practice, case study teachers across sites consistently reported that the

positive, supportive, lower-pressure summer environment made them feel free to teach in a way that they believed was best for students and to experiment with new classroom strategies. Some case study teachers described BXS as a “learning lab” for teachers, where they could experiment with new classroom strategies in ways they could not during the school year because of pacing, testing, or time constraints. One teacher reflected:

I would say it's a lot more fun. It's a lot more freeing for educators to teach during BellXcel than in the school year for a couple of different reasons. . . . We have that long amount of time, like 90 minutes, with our kids and not having the state standards that we have to teach. . . . It's given me more confidence. And in turn, I think that's made me more of a risk-taker and it's just made me—just hold my head high, you know, as an educator, more so than—you know, it's kind of tough in the school year being a teacher.

As we discussed earlier in this report, the BXS key classroom practices are consistent with student-centered instructional practices in that they aim to develop students' academic and social and emotional skills with a focus on customizing student supports. Case study teachers noted that longer class periods with smaller class sizes, coupled with the absence of school-year testing and curriculum pacing constraints, enabled them to spend more time focusing on students' social and emotional development by building relationships with students and understanding their learning preferences and needs. Some teachers described using this extra time and flexibility to incorporate more relationship-building and SEL activities into BXS classrooms than the teachers typically did during the school year. Most teachers also mentioned that the freedom from these constraints made it easier to use data to differentiate, or tailor, instruction to students' individual learning needs. As one teacher explained:

There is more time and less structure with [BXS]. When I say that, I mean as far as the learning standards go. I feel like I'm free to take the time to get to know my students and integrate team building. . . . Of course, you want to do that as a teacher, and I do, but

[during the school year?] it might not be to the depth that I do it in BXS because of the time.

Furthermore, some case study teachers believed that access to students' Star assessment data (from diagnostic assessments administered across BXS sites at the beginning and end of summer; Renaissance Learning, 2020), having a coteacher in each classroom, and smaller classes enabled the teachers to use data to group students and to use center-based learning,¹⁰ rather than whole-class instruction, more frequently than during the school year. One teacher explained that using centers felt more manageable with BXS supports, compared with the school year:

The one thing that made that [grouping students into centers or stations] possible was having two or three adults in the room. Because even with stations, with one adult, it can be difficult to get to every station if three stations have a question at the same time. Having two or three adults, we could easily make sure that the student's question got answered and that they're back on track or they understand what to do.

Most teachers who participated in our focus groups worried that the absence of coteachers and longer class periods, coupled with their school's curriculum pacing requirements, would limit the ability to use student-centered practices and to engage in active experimentation during the school year as much as in the summer. As one teacher explained:

We have a lot of testing during the school year as far as like benchmarks. So we're not always open to trying new things because, then, I think—well, this is new, and we've never done this before and what if it's a flop.

However, some teachers believed that their school year contexts were more conducive to receiving useful data about students' instructional needs because there was more time to administer a variety of assessments and because they had access to information about students' special education needs. For example, teachers in one case study site reported receiving Star assessment data too late in the summer for it to be useful for informing their instruction.

Case study teachers reported they were most likely to develop students' social and emotional

skills and use positive behavior-management techniques in their school-year practice. Although many teachers were concerned that they would not be able to use the student-centered practices emphasized in BXS during the school year to the same extent that they did during the summer, strategies to support students' SEL and positive behavior management were exceptions. During case study focus groups and follow-up phone interviews, we asked teachers whether their experience teaching in BXS would influence the way they approached their school-year classroom practice. As we described earlier, several case study teachers across the three sites described challenges they anticipated to using student-centered practices, such as using centers and collaborative teaching without the additional resources BXS provided. However, teachers across sites largely agreed that strategies to support students' SEL and positive behavior management would be more easily applicable to their school-year instruction, even without the same resources they enjoyed during BXS.

In the case study focus groups, teachers shared concrete examples of how the social and emotional skill-building strategies they learned during BXS changed their thinking regarding interacting with their students and how this learning would change their school-year instruction. One teacher described how their experiences through BXS would change the way they provided feedback to students:

Instead of saying like, "Oh, good job, this is so good," you know things [so that you can say], "Oh, I'm glad you put so much work into it." [This enables you to make sure] that they're equating that success and that positivity with the fact that they put something into it and worked hard.

Taking the time to build deeper relationships with students during BXS changed some teachers' approach to interacting with students during the school year:

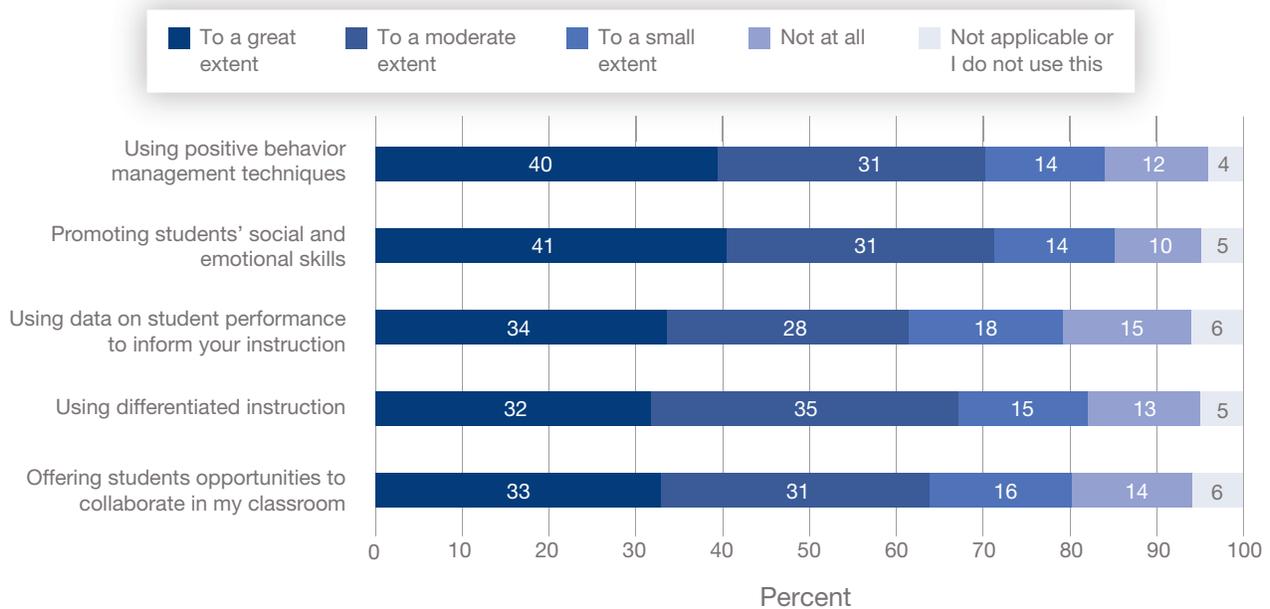
I really enjoyed working with the kids in the summer. I've tried to bring some of that focus on the relationship back to the classroom. That's probably been the biggest impact on me, just trying to find ways to connect, particularly with students that either aren't doing well

or don't particularly care for math. Trying to make relationships so there's something other than me saying, "I need you to work on this problem." Or, "Where's your worksheet?" Or, "Where's your pencil?" Or that sort of thing.

Teachers' survey responses supported the idea that teachers may be more likely to transfer strategies related to developing students' SEL and positive behavior management to school-year practice, compared to other BXS key classroom practices. We asked BXS teachers a series of survey questions to explore their perceptions about how their BXS professional learning experiences affected their school-year teaching. Compared with other key classroom practices, more teachers reported that their BXS experience improved their use of strategies related to developing students' social and emotional skills and positive behavior management during the school year than other classroom practices (see Figure 3 and Steiner, Stelitano, et al., 2021, Table G.2).

Instructional coaching varied, but case study teachers perceived their instructional coach as a valuable support regardless of whether the coach provided developmental feedback on their instruction. Survey and case study data indicated that the implementation of instructional coaching varied across BXS sites. According to its guidance documents, the BXS model encourages all teachers to access instructional coaching. However, slightly less than half (45 percent) of surveyed teachers reported receiving one-on-one instructional coaching (see Steiner, Stelitano, et al., 2021, Table F.3), but most who did receive it found it to be useful. Majorities of surveyed BXS teachers who participated in instructional coaching during the summer believed it helped them use key classroom practices in their summer classrooms and was relevant to the subjects they taught (see Steiner, Stelitano, et al., 2021, Tables F.5 and F.6).

FIGURE 3
Extent to Which BXS Professional Learning Experiences Improved Teachers' Practice in Various Instructional Strategies



NOTES: Survey question text: "Please indicate the extent to which the professional learning opportunities you received in your summer 2019 BellXcel program helped you improve your practice in each of these instructional strategies this school year?" Response options: "Not at all"; "To a small extent"; "To a moderate extent"; "To a great extent"; "I do not use this strategy in my school year instruction"; and "Strategy not applicable to my role." Some rows may not sum to 100 percent due to rounding. N = 393-395.

Our case study data provided deeper insight into why some BXS teachers may not have reported receiving one-on-one coaching and into what coaching looked like when it did occur. When we interviewed BXS instructional coaches, all three reported that their roles entailed some administrative responsibilities beyond coaching. This meant that coaches had to balance other responsibilities, such as setting up and cleaning up after student meals, communicating with parents, or helping manage behavioral issues, which sometimes made scheduling formal one-on-one coaching sessions difficult. Therefore, while all coaches reported having a regular presence inside teachers' classrooms and communicating frequently, most interactions were informal.

BXS model guidance documents also encourage instructional coaches to provide instructional feedback to teachers around the BXS key classroom practices following review of their lesson plans and classroom observations. However, case study data showed that coaches in two sites did not generally offer instructional feedback unless it was specifically requested by teachers. Teachers in these two case study sites described the instructional coach as a source of support that they could access if needed but added that the coaches generally did not provide instructional feedback unless teachers specifically requested it. A teacher in one of these two sites explained that they had not needed the coach's instructional support yet but knew that the coach was there if they needed anything:

I know I haven't needed it. . . . But I think if I did, because she is very supportive in a way that she's in my classroom every day, "Do you need anything? Can I help you with anything?"

The instructional coach in the second of these two case study sites reportedly took a more hands-off approach. One teacher explained, "If you don't hear from [the coach regarding instructional feedback], everything is good."

In the third site, the instructional coach played a more active role in supporting teachers to improve their instruction. Teachers described receiving weekly observations of their classes and meeting regularly with the coach to receive feedback on their lesson plans. Even when coaching did not include

developmental instructional feedback and was more informal, teachers still valued the coaches' support. The focus groups with teachers confirmed that instructional coaching was one of the most valued professional learning activities BXS provided. Teachers described coaches as a regular presence in their classrooms and a good resource for information about the BXS key classroom practices and program expectations. As one teacher explained:

The instructional coach I think is a great idea because it sends a message that instruction is important in this program . . . [and] we want the best of the best strategy being used.

BXS in a National Context

In this subsection, we address RQ3: How do BXS teachers' perceptions of their summer professional learning experiences compare to those of teachers across the U.S.?

We addressed RQ3 by comparing BXS teachers' perceptions of their summer professional learning experiences with those of teachers nationally who reported employment in an academic-focused summer program. The BXS survey results presented in this section draw from the subsample of 396 BXS teachers who responded to both summer and fall surveys. The ATP survey results were drawn from the subsample of 104 ATP teachers who were employed in an academic-focused summer program. As we discuss in more detail in this section and in the separate technical appendixes (Steiner, Stelitano, et al., 2021), BXS teachers were demographically different from teachers nationally. We performed analyses to adjust for these demographic differences and to test for statistically significant differences between the adjusted samples. We present the results of these adjusted comparisons in this section.

Teachers who worked for BXS in 2019 were more diverse and less experienced than teachers nationally. Comparison of the demographic characteristics of BXS teachers and teachers nationally revealed several differences, as shown in Table 3. Higher percentages of BXS teachers identified as nonwhite, had less than four years of teaching

TABLE 3
Demographic Characteristics of BXS Teachers Who Responded to Both Summer and Fall BXS Surveys and ATP Teachers

	Percentage of Teachers	
	BXS	ATP
Race/ethnicity**		
White	54	70
Nonwhite	46	30
Gender**		
Female	88	76
Male	12	24
Grade levels***		
K–5	75	43
6–12	5	53
Both	20	4
Years of teaching experience***		
0–3 years	20	2
4+ years	80	98
Education**		
Less than a bachelor’s degree	10	0
Bachelor’s degree or higher	90	100

NOTES: The characteristics presented in this table are based on the BXS teachers who responded to both summer and fall surveys, as measured by their fall survey responses. BXS $N = 396$; ATP $N = 104$. Asterisks indicate statistically significant difference in percentages: ** $p < 0.01$; *** $p < 0.001$.

experience, taught grades K–5, and had less than a bachelor’s degree. Most of the differences were expected. As we described earlier in this report, BXS employed assistant teachers who were not required to hold a teaching certificate or a bachelor’s degree and who may also have had limited teaching experience. The differences in racial/ethnic composition may be the result of local hiring practices. The BXS model is designed to serve students in high-need communities, and site staff often hired teachers locally, from the communities in which the sites are located. BXS teachers were also less likely to teach grades 6–12 during the school-year. This makes sense because the BXS sites do not serve students in high school grades. Similar to teachers nationally, the BXS teachers in our sample were primarily female.

The BXS program was similar in academic focus, length, and ages of students served to academic summer programs nationally but differed in duration of the program and academic subjects addressed. Like the academic summer programs teachers nationally described, BXS focused primarily on academic instruction in mathematics and ELA. BXS programs were five days per week and primarily served students aged 5 to 13 (about grades K–6). Majorities of teachers nationally who were employed in academic summer programs reported those programs were in session three to five days per week and served students ages 5–13 (see Steiner, Stelitano, et al., 2021, Tables E.7, E.8, and E.9).

Unlike most academic summer programs nationally, BXS did not provide instruction in subjects other than math and ELA. Nationally, 59 percent of teachers in academic summer programs reported that their program provided students with instruction in such subjects as science or social studies (see Steiner, Stelitano, et al., 2021, Table E.10). All BXS sites provided enrichment activities—such as field trips to museums and other cultural activities—and enrichment courses—such as music and visual arts. Similar field trips and courses were not common in academic summer programs nationally—29 percent of teachers nationally reported that their summer programs included field trips with an educational focus (see Steiner, Stelitano, et al., 2021, Table E.10). The duration of BXS programs was also longer—four to six weeks—than most academic summer programs nationally, which were two to four weeks.

BXS teachers were more likely than teachers who worked for academic summer programs nationally to report receiving professional learning activities that could include instructional feedback. In general, larger proportions of BXS teachers reported engaging in professional learning activities—such as classroom observations—that typically include instructional feedback than teachers nationally. Specifically, 79 percent of BXS teachers reported receiving observations of their summer classrooms followed by feedback, compared to 38 percent of teachers nationally, as shown in Table 4. Almost half of BXS teachers reported receiving one-on-one coaching as a part of their summer professional learning compared with less than a third

TABLE 4

Comparison of Summer Professional Learning Activities with Instructional Feedback Received by BXS Teachers and Teachers Nationally Employed in an Academic Summer Program

Professional Learning Activity	Percentage of BXS Teachers Who Received the PL Activity	Percentage of Teachers Nationally Employed in an Academic Summer Program Who Received the PL Activity
Observations of my classroom performed by an administrator and followed by feedback**	79	38
Collaborating on instruction with my colleagues	73	75
Analyzing student work with my colleagues	53	44
One-on-one coaching sessions**	43	29
Group coaching sessions with my peers	42	37
Opportunities to observe other educators' classrooms	28	29

NOTES: BXS Survey question text: "Please indicate whether, during the summer program, you received each of the following kinds of supports, and the extent to which you found it helpful for improving your instruction." ATP survey question text: "Please indicate whether you have received each of the following kinds of professional learning opportunities during summer 2019, and the extent to which you found them helpful for improving your instruction this school-year (2019–20)." Response options for both surveys: "I did not receive this"; "I received it and found it unhelpful"; "I received it and found it somewhat helpful"; "I received it and found it very helpful." Percentages shown here were calculated by subtracting responses of "I did not receive this" from 100 percent.

These results were adjusted for the sample differences. See the separate technical appendixes (Steiner, Stelitano, et al., 2021) for details about this analysis. The BXS teacher data are based on the subset of teachers who responded to both summer and fall surveys ($N = 281$ – 283). The national teacher data are based on results from a subset of teachers who reported summer employment with an academic program on the ATP ($N = 95$). Asterisks indicate statistically significant difference in percentages: ** $p < 0.01$.

of teachers nationally. More BXS teachers reported opportunities to analyze student work as a part of their summer professional learning than teachers nationally. About three-quarters of BXS teachers and teachers nationally reported having opportunities to collaborate with their colleagues on instruction as part of the professional learning experiences in their academic-focused summer programs. Although not all these differences are statistically significant, the pattern of results suggests that BXS teachers were more likely to experience some professional learning opportunities that could include instructional feedback.

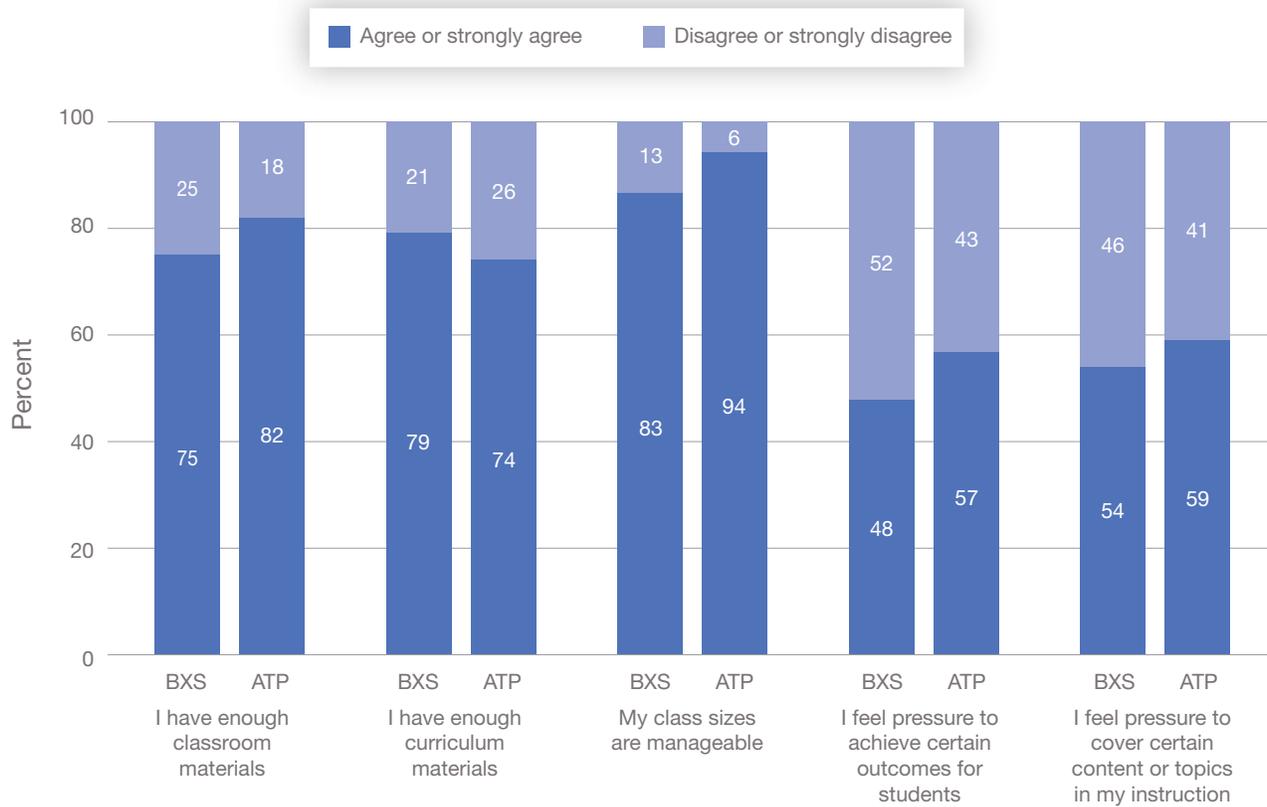
BXS teachers felt somewhat less pressure in their summer environments than teachers nationally. BXS teachers and teachers nationally held similarly positive opinions about the supports and resources—such as sufficient classroom materials, sufficient curriculum materials, and manageable class sizes—in their summer programs. However, BXS teachers were slightly less likely to report feeling

pressure to achieve certain outcomes for students and to cover certain material in their instruction. Fifty-seven percent of teachers nationally who worked for academic summer programs agreed or strongly agreed that they felt pressure to achieve certain outcomes for students in their summer programs, compared to 48 percent of BXS teachers (Figure 4).

One possible explanation for this is the voluntary nature of BXS for students. Many professional learning opportunities for teachers nationally were required or provided by their school districts (see Steiner, Stelitano, et al., 2021, Table C.5), which could indicate that the activities were part of a district-sponsored summer school program, which often require student attendance. While we did not specifically explore these differences, it may be that teachers feel less pressure teaching in summer programs that are voluntary for students than they do in summer school programs that are mandatory for students.

FIGURE 4

Perceptions of BXS Teachers and Teachers Nationally About Their Academic Summer Programs



NOTES: The BXS teacher data are based on the subset of teachers who responded to both the summer and fall surveys. The national teacher data are based on results from a subset of teachers who reported summer employment with an academic program on the ATP. BXS survey question text: “Please indicate your level of agreement with each of the following statements about your summer 2019 BellXcel program?” ATP survey question text: “Please indicate your level of agreement with each of the following statements about the program where you were employed in summer 2019?” Response options for both questions: “Strongly disagree,” “Disagree,” “Agree,” and “Strongly Agree.” This figure presents dichotomized results adjusted for sample differences. None of the differences were statistically significant. BXS N = 343–352; ATP N = 84–91. See the separate technical appendices (Steiner, Stelitano, et al., 2021) for details about this analysis and Table H.1 for the full set of results.

BXS teachers were more likely to report that summer professional learning helped improve their use of student-centered practices during the school-year than teachers nationally. Larger majorities of BXS reported that their summer professional learning helped them improve in student-centered instructional practices during the school-year than did teachers in academic summer programs nationally, as shown in Table 5. These differences were all large (10 percentage points or more) and statistically significant. The differences were largest—more than 15 percentage points—for using questioning

strategies to promote students’ critical thinking, using positive behavior-management techniques, and using differentiated instruction.

Implications and Policy Recommendations

This report describes teachers’ perceptions of their summer professional learning experiences nationally and in BXS, an academic-focused summer program. The report explores teachers’ beliefs about how their summer professional learning experiences compared

TABLE 5

Extent to Which Summer Professional Learning Helped Improve the Use of Key Instructional Practices Among BXS Teachers and Teachers Employed in Academic Summer Programs Nationally

Instructional Strategy	Percentage of BXS Teachers Who Responded		Percentage of Teachers Nationally Who Responded	
	None or to a Small Extent	To a Moderate or Great Extent	None or to a Small Extent	To a Moderate or Great Extent
Offering students opportunities to collaborate in my classroom*	18	82	30	70
Using differentiated instruction**	18	82	34	66
Using positive behavior-management techniques**	19	82	37	63
Using questioning strategies to promote students' critical thinking**	21	79	40	60
Promoting students' social and emotional skills through your instruction*	22	78	32	68
Using a variety of strategies to check for students' understanding**	20	80	35	65

NOTES: BXS Survey question text: "Please indicate the extent to which the professional learning opportunities you received in your summer 2019 BellXcel program helped you improve your practice in each of these instructional strategies this school-year?" ATP Question text: "Please indicate the extent to which the professional learning opportunities you received during summer 2019 helped you improve your practice in each of these instructional strategies this school-year?" Response options for both questions: "Not at all," "To a small extent," "To a moderate extent," and "To a great extent."

This table presents dichotomized results adjusted for sample differences. See Steiner, Stelitano, et al., 2021, Table H.2 for the full set of results. The BXS teacher data are based on the subset of teachers who responded to both summer and fall surveys ($N = 326\text{--}337$). Our national teacher data are based on results from a subset of teachers who reported summer employment with an academic program on the ATP ($N = 78\text{--}93$). Asterisks indicate statistically significant differences in percentages: * $p < 0.05$; ** $p < 0.01$.

with those their schools and districts provided and examines some of the contextual factors and supports teachers believed enhance professional learning during the summer. To better understand summer as a context for teacher professional learning and how it compares with other professional learning opportunities teachers receive, we asked teachers about opportunities their schools and districts provided more generally.

Although these survey and qualitative data do not tell us whether teacher participation in summer professional learning is effective for improving student learning, they do provide information that could be of interest to policymakers and practitioners who are looking for opportunities to provide teachers with access to professional learning opportunities beyond the school year. The implications may be particularly helpful for school and district leaders seeking to explore new opportunities for teacher professional learning to make up for time lost because of COVID-19-related school closures. In the current context, in which many districts are relying on remote instruction, it is increasingly important

that school leaders find efficient and effective ways to develop teachers' use of student-centered practices to meet students' increasingly diverse needs while developing their social and emotional skills—topics that the BXS program focuses on. In addition to informing practice, these findings can also help identify new avenues for research. In this final section, we summarize implications, based on our findings, for policymakers and educators who are considering summer as an opportunity to provide teacher professional learning.

Schools and districts should consider capitalizing on academic summer programs as a time for teachers' professional learning. Our findings show that teachers nationally and in BXS believed that their summer professional learning experiences were of high quality and improved their school-year teaching. Furthermore, teachers nationally who taught in academic summer programs were more likely to report participating in professional learning activities that could include instructional feedback—specifically instructional coaching and classroom observations. Research has indicated that

teachers who have opportunities to practice instructional strategies and who receive developmental feedback related to their classroom practice have enhanced professional learning experiences and are more likely to improve their school-year instruction (Kraft, Blazar and Hogan, 2018; Quintero, 2019).

Together, our findings suggest that school and district leaders should consider capitalizing on existing academic summer programs as a time for teachers' professional learning. Opportunities for teachers to instruct students during the summer exist beyond academic summer programs, such as BXS, and include district-sponsored summer school and extended school year for students with disabilities. Finding opportunities beyond the school year for teachers' professional learning is increasingly urgent to make up for time lost because of school building closures related to COVID-19. It is clear that the disruptions to schooling that COVID-19 has caused will extend well into the next school year (Culbertson, Nataraj, and Kramer, 2020), and academic instruction in the summer may therefore become more commonplace as a strategy to recuperate student learning losses. School and district leaders should consider how they might purposively utilize this time for teachers' professional learning, possibly by partnering with academic summer programs, such as BXS, or by incorporating opportunities for developmental feedback in their own summer school programs. Similarly, academic summer programs should consider aligning their professional learning topics to the needs of schools or districts.

Summer environments that are low-pressure, positive, and supportive can enhance teachers' professional learning. Our analysis of the BXS program revealed that teachers believed that the lack of school-year curriculum pacing and testing requirements, presence and support from program managers and instructional coaches, and easy access to curricula and resources created a setting for teaching that was low-pressure, positive, and supportive. Teachers in the BXS case study sites largely agreed that teaching in such settings was energizing and contributed to their professional learning by allowing them to experiment and try different classroom practices. This meant being able to take time to build stronger relationships with students, incorporate activities

Summer environments that are low-pressure, positive, and supportive can enhance teachers' professional learning.

to promote students' SEL, and tailor activities to students' needs without the fear of falling behind the set pace of the curriculum or deviating from test preparation. Teachers reported that smaller class sizes, longer class periods, and having more than one teacher in the classroom were particularly helpful for using student-centered practices.

Summer teaching opportunities may naturally embody some of the conditions that enable teachers to feel comfortable experimenting, such as smaller class sizes and freedom from school-year pacing and testing constraints. School and district leaders may benefit from understanding how teachers perceive the contextual conditions of their summer teaching environments and should explore how they could foster a low-pressure environment in existing summer teaching settings to enable teachers to experiment and build confidence in classroom practices.

Summer may support teacher professional learning of student-centered practices—particularly strategies to support students' SEL and positive behavior management. Student-centered practices—particularly strategies to promote students' SEL—are especially important in the current educational landscape for addressing students' academic and emotional needs, which are likely exacerbated by school closures and uncertainties about reopening (Hamilton, Pane, and Steiner, 2020). In a recent national survey of teachers administered during COVID-related school closures, almost 70 percent reported needing more support from their school or district regarding strategies and guidance for supporting students' social and emotional development (Hamilton, Kaufman, and Diliberti, 2020).

As our data indicate, teachers who worked for academic summer programs nationally were more likely than teachers who did not to report that their summer professional learning experiences improved their use of certain student-centered practices during the school year—specifically, promoting students’ social and emotional skills and using positive behavior-management strategies. Academic summer programs with supportive contextual conditions, such as BXS, may further support teachers’ development of these strategies. BXS teachers were more likely to report that summer professional learning helped improve their use of student-centered practices during the school year than teachers nationally. Our interviews and focus groups with BXS teachers illustrated how teachers connected positive contextual conditions (described above) with their capacity to spend more time building relationships with students and trying new strategies to promote SEL and positive behavior management in their classrooms. Therefore, academic summer programs may be conducive settings for teacher professional learning of student-centered practices.

Notes

¹ The National Teacher and Principal Survey Teacher Questionnaire, a nationally representative survey that includes questions about teachers’ professional learning, has not yet asked about summer professional learning and does not distinguish between summer and school-year professional learning. The most recent (2017–2018) version of the teacher questionnaire can be found on the National Center for Education Statistics website (National Center for Education Statistics, 2017).

² The ATP consists of approximately 25,000 randomly selected teachers that RAND maintains and utilizes to field surveys to understand teachers’ experiences and gain feedback on important issues of educational policy and practice. The ATP can be utilized for fielding stand-alone surveys on a rolling basis throughout the year—as was the case in this study—or adding specific questions to existing surveys. RAND makes data from the ATP available to the public.

³ BellXcel is a national nonprofit in youth development that aims to advance and expand educator practice and strengthen support for youth and families. BellXcel created a summer program in addition to BellXcel Afterschool and BellXcel Remote, not described in this report.

⁴ We were able to adjust for race/ethnicity, gender, grades taught, and level of education. We were not able to adjust for years of teaching experience because of data sparsity.

⁵ This result uses the number of teachers who reported teaching in any type of summer program as the denominator and the number who reported teaching in an academic-focused summer program as the numerator. This result can be calculated from the data presented in Steiner, Stelitano, et al., 2021, Table C.2 but is not reported there explicitly.

⁶ The definitions of summer programs were adapted from McCombs, Whitaker, and Yoo, 2017.

⁷ Science, technology, engineering, arts, and mathematics.

⁸ Tiered instruction offers different levels of support for students with varying degrees of need who are working toward learning the same concepts and/or skills.

⁹ In the context of BXS, center-based learning entails using data on student learning strengths and needs to group students. Student groups then rotate through a series of activities, or “centers.”

¹⁰ Center-based learning entails using data on student learning strengths and needs to group students. Student groups then rotate through a series of activities, or “centers.”

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Acknowledgments

The authors would like to acknowledge the following people and organizations for their contributions to this work. We thank BellXcel for funding this work. This document benefited substantively from feedback from Susan Straus, Alice Huguet, and Robin Jacob, as well as Bryan Hall, Brenda McLaughlin, Carrie Underwood, and their colleagues at BellXcel. We are grateful to the BellXcel staff and BXS teachers who participated in the interviews, focus groups, and surveys for this study. We appreciate the efforts of the RAND American Educator Panels research team, particularly David Grant, Matthew Strawn, Christopher Young, Claude Setodji, and Gerald Hunter. We also appreciate input on the survey questions and interview protocols from Bryan Hall, Brenda McLaughlin, and Carrie Underwood at BellXcel and from Laura Hamilton, Julia Kaufman, and Anamarie Whitaker at RAND. We thank Christopher Doss for help with the survey analyses and Stephanie Lonsinger for expert document support. We thank the original sponsors of the American Educator Panels: the National Education Association and the Bill & Melinda Gates Foundation. Finally, we are extremely grateful to the U.S. public school teachers who have agreed to participate in the American Teacher Panel and took this particular survey. Their time and willingness to share their experiences are invaluable for this effort and for helping us understand more about how to better support their hard work in schools. Amanda Wilson gracefully managed the publication process and Phyllis Gilmore provided expert editing. Any flaws that remain are solely the authors' responsibility.

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About This Report

Helping teachers improve their instructional practice through high-quality professional learning opportunities is a key strategy for improving student academic, social, and emotional outcomes. Most studies about teacher professional learning focus on discrete activities or workshops that occur during the school year; little is known about the professional learning activities teachers participate in over the summer. This report begins to fill that gap by presenting data from the first nationally representative survey of teachers about their summer professional learning opportunities. The report also presents data from a descriptive study of BellXcel Summer (BXS), an academic-focused summer program for students that provides teachers with numerous professional learning opportunities, and compares BXS teachers' perceptions of their summer professional learning experiences with those of teachers nationally. Exploring the possibilities of utilizing summer as a time for teacher professional learning will be especially imperative in the wake of the coronavirus disease 2019 (COVID-19) crisis, which has disrupted opportunities for school-year professional learning. Findings in this report can help district and school leaders, professional learning providers, and other support providers understand teachers' perceptions of their summer professional learning opportunities and explore ways to maximize summer programs for students as a time for teacher professional learning.

This study was undertaken by RAND Education and Labor, a division of the RAND Corporation that conducts research on early childhood through postsecondary education programs, workforce development, and programs and policies affecting workers, entrepreneurship, and financial literacy and decisionmaking. This study was sponsored by BellXcel. A national nonprofit, BellXcel partners with youth organizations and schools to license its K–8 summer and afterschool programming. With nearly 30 years of experience innovating education solutions, BellXcel empowers educators and youth development staff to reach tens of thousands of scholars and families each year. BellXcel's work is made possible through the support of national and local investors, including Ballmer Group, Edna McConnell Clark Foundation, The Deerbrook Charitable Trust, New York Life Foundation, and the Charles and Lynn Schusterman Family Foundation, among others. For more information, visit www.bellxcel.org.

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