Districts Continue to Struggle with Staffing, Political Polarization, and Unfinished Instruction

Selected Findings from the Fifth American School District Panel Survey

A

n American School District Panel (ASDP) survey administered in fall 2021 revealed district leaders’ widespread concerns about teacher, substitute, and bus driver shortages; political polarization interfering with schooling; students’ mental health, behavior, and attendance; and declining student enrollment (Diliberti and Schwartz, 2022; Schwartz and Diliberti, 2022a). In this report, we revisit these concerns to assess whether the widespread problems that district leaders identified back in fall 2021 have persisted throughout the remainder of the 2021–2022 school year. We also provide an update on the main ways that school districts are seeking to redress the negative effects of unfinished instruction because of the coronavirus disease 2019 (COVID-19) pandemic.

To obtain a national view of the challenges that school districts were facing as the third pandemic school year came to a close, we surveyed a random sample of 291 district and charter network leaders between February 28, 2022, and April 10, 2022. We then weighted their responses to make them nationally representative of school districts across

Key Findings

- Ninety percent of school districts changed operations in one or more of their schools at some point in the 2021–2022 school year because of teacher shortages.
- The typical district has increased substitute teachers’ daily pay 6 percent above prepan- demic levels, after adjusting for inflation.
- More than three-quarters of districts have increased their number of teaching and non-teaching staff above prepandemic levels.
- Roughly half of district leaders see a fiscal cliff looming after coronavirus disease 2019 (COVID-19) federal aid expires, and they are trying to prepare for it.
- As in fall 2021, district leaders had high levels of concern about student and staff mental health, and about half were concerned that political polarization about critical race theory was interfering with schooling.
- Most districts have converged on the same interventions for student learning loss: summer programs, mental health services, tutoring, and social and emotional learning instruction.
Nearly All Districts Changed Operations in One or More of Their Schools in 2021–2022 Because of Teacher Shortages

Throughout the pandemic, districts have needed to shift their operations on the fly because of insufficient staff to maintain normal operations. To learn how common this was in the 2021–2022 school year, we asked districts to indicate which of 18 potential operational changes (plus a nineteenth “other” option), if any, that one or more of their schools adopted for at least some portion of the school year.

With the exception of changes to staff pay, each operational change we asked about in the survey is an exigency to address short-term shortages likely stemming from two sources: heightened rates of staff absences on a given day and insufficient substitute staff to cover for them. However, schools might also have adopted some of the operational shifts we listed because of vacant teacher positions, which is a longer-term staffing problem than simply increased absences.

Ninety percent of surveyed districts said they made at least one of the operational changes we listed, and the typical district selected five out of the 19 operational changes. We interpret the high prevalence of districts’ operational changes as evidence that many districts had to scramble to keep schools open in 2021–2022. In other words, changes to pay, to staff duties, and to the school schedule were the norm, not the exception, in the 2021–2022 school year.

Although nearly all districts made some operational changes, districts adapted to staffing shortages in different ways (see Figure 1). Although it is not entirely clear why districts might have chosen certain operational changes over others, districts’ differential access to federal COVID-19 relief funds likely has been a key enabler of increases in pay and hiring as a means of addressing understaffing. Below we note the prevalence of the most-common operational changes,

“Operational issues are really just taxing us at every level. . . . As an example, [there were] three different schools on three different days that I had to close because I had too many call-offs and not enough staff to replace them, or substitutes to replace them.”

—Superintendent in an ASDP case study district
and we note which district subgroups, if any, were particularly likely to have enacted such changes.

**About half or more** of districts reported that one or more of their schools took the following actions because of teacher shortages:

- increased pay or benefits for substitute teachers (60 percent)
- enlisted teachers to cover extra duties, such as hallway monitoring, bus duty, or cafeteria duty (53 percent of districts overall, including 68 percent of urban districts)
- combined classes (51 percent)

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“We were hopeful that maybe this year would be normal, but it really hasn’t [been] . . . In the fall, we had a team of district team members going out and spending a lot of time covering classes, filling in gaps.”

—District leader in an ASDP case study district
we posed several questions to district leaders in spring 2022 about substitute teacher pay in their districts before and during the pandemic to learn whether districts increased substitute teachers’ daily wage rate as a means of increasing the availability of substitute teachers. After adjusting districts’ responses to be in March 2022 dollars to account for inflation, we found that most districts (63 percent) raised substitute teacher pay between fall 2019 and spring 2022. As shown in the top right section of Figure 2, three in ten districts raised pay by less than 10 percent over this period, two in ten raised pay between 10 percent and 25 percent, and one in ten raised pay by more than 25 percent. The typical district increased substitute teachers’ daily pay 6 percent above prepandemic levels. Although not shown in Figure 2, we also asked respondents what was the highest daily wage that any school district paid for substitute teachers in their local area, and 85 percent of district respondents listed a wage higher than their own.

As a point of comparison, the 6 percent increase in substitute teachers’ daily wage is greater than the 4 percent hourly wage increase from September 2019 to December 2021 (the most-recent data available) for retail trade workers (U.S. Bureau of Labor Statistics, 2021). We selected retail trade workers as a point of comparison because they are also frontline workers for which there have been shortages during the pandemic, and they generally earn wages that are on average similar to those of substitute teachers. The greater pay increase for substitute teachers than retail workers could reflect just how acute the shortage of substitute teachers—for whom districts competed regionally—has been during the pandemic. Accordingly, we do see that a meaningful proportion of districts (11 percent) raised their pay by more than 25 percent above inflation-adjusted prepandemic rates. In results not shown, 52 percent of districts increased their substitute pay by equal or larger amounts than wage increases in retail trade over the same period.

On Average, Districts Have Increased Substitute Teachers’ Daily Pay 6 Percent Above Their Prepandemic Rate

Due to the severity of the national substitute teacher shortage in fall 2021 (Schwartz and Diliberti, 2022a),
FIGURE 2
Average Daily Pay for Substitute Teachers Prepandemic and in Spring 2022 as Well as Percentage of Districts Reporting Various Pay Increases for Substitute Teachers in the Pandemic Era

Districts paid an average of $122 per day in spring 2022 compared with $115 per day before the pandemic began.

About 6 out of every 10 districts increased their pay above inflation adjustments.

Urban districts and districts serving mostly students of color paid the most for substitute teachers both before the pandemic and as of spring 2022.

NOTES: This figure depicts response data from the following survey questions: “What daily rate did your district/CMO pay for substitute teachers as of fall 2019 prior to the pandemic?” and “What daily rate does your district/CMO currently pay for substitute teachers?” (n = 264). Both survey questions also included a “don’t know” option, which was selected by roughly 3 percent of respondents; these results have been omitted from this figure. In this figure, prepandemic (fall 2019) estimates have been adjusted for inflation using the Bureau of Labor Statistics’ Consumer Price Index calculator and are reported in March 2022 dollars to be comparable with the spring 2022 estimates. For reference, district leaders reported prepandemic pay to be $102 per day on average, which is equivalent to $115 in March 2022 dollars. Responses were binned (i.e., sorted into categories according to the percentage change in pay for substitute teachers between fall 2019 and spring 2022) for the chart in the top right panel. In the other charts, the vertical black bars represent the 95 percent confidence interval for each estimate.
Districts increased substitute pay by about the same amount between fall 2019 and spring 2022 regardless of where they were located (in urban, suburban, or rural communities), the enrollment size of the district, and the population of students served. As shown in the bottom part of Figure 2, urban districts—which tend to be in areas with a high cost of living—and districts serving mostly students of color (about one-third of which are urban) had the highest daily substitute pay before the pandemic began and retained the highest daily pay rate as of spring 2022. As shown in Box 1, a large majority of urban districts serve predominately students of color, so the patterns observed in Figure 2 could be driven by the subset of districts that belong to both subgroups.

Seventy-Seven Percent of Districts Have Expanded Their Number of Teachers Above Prepandemic Levels, and Many Are Still Hiring

Sixty-eight percent of district leaders reported in fall 2021 that the pandemic had caused a shortage of teachers in their district (Schwartz and Diliberti, 2022a), yet multiple studies of teacher turnover...
have not found evidence of unusually large attrition thus far throughout the pandemic (Aldeman, 2022a; Diliberti and Schwartz, 2021a; Goldhaber and Theobald, 2022; Makkonen and Jaquet, 2021). The spring 2022 survey results shed some light on this seeming disconnect. In short, we believe it is districts’ increase in number of staff that they seek to employ rather than an exodus from teaching that is straining the teacher labor market. More than three-quarters of surveyed district leaders indicated that they have expanded their substitute and/or regular teaching staff above prepandemic levels as of spring 2022.

On our spring 2022 survey, we posed the question, “In which job categories, if any, has your district increased the number of staff for 2021–2022 compared to their pre-pandemic level in 2019–2020?” and asked respondents to select one of four response options for each of the 23 job categories we listed: (1) “we have not increased the number of staff, and we are not trying to do so,” (2) “we have already increased the number of staff, and we are not trying to increase further,” (3) “we have not yet increased the number of staff, but we are trying to do so,” or (4) “we have already increased the number of staff, and we are trying to increase further.”

As shown in Figure 3, 77 percent of districts have already expanded the number of teachers and/or substitute teachers they employ, and 79 percent have expanded the number of nonteaching staff—such as bus drivers, paraprofessionals, and tutors—they employ above their prepandemic level. Figure 3 also shows that a high proportion of every district subgroup we examined has already expanded their teaching and nonteaching staff above their prepandemic levels. Leaders of urban districts and large districts, which often overlap (see Box 1), were particularly likely to have expanded their nonteaching staff, whereas low-poverty districts were more likely than high-poverty districts to have expanded their teaching staff above prepandemic levels.

In addition to the expansion they have already achieved, about eight or more out of every ten districts are still trying to expand their teaching and/or nonteaching staff above prepandemic levels. For example, even though 90 percent of large districts have already expanded their nonteaching staff, 94 percent are still trying to expand staff in this broad category. The final two rows of Figure 3 show that urban districts, districts serving mostly students of color, and large districts (which, again, are highly overlapping, as shown in Box 1) are working to expand hiring in more job categories for both teaching and nonteaching staff.

We have several hypotheses about these expanded hires. The first is that districts are more likely to be expanding nonteaching than teaching positions because these hires are more-easily retracted if districts reach a fiscal cliff after federal stimulus funds expire. (We discuss districts’ anticipation of a fiscal cliff in more detail in the next section.) Differential access to COVID-19 federal relief funds are likely affecting districts’ expansion rates: Those with the greatest concentrations of poverty (which include many urban and large districts) have received more COVID-19 federal aid (Jordan and DiMarco, 2022). Second, urban districts hire a higher proportion of staff of color than do their counterparts (National Center for Education Statistics, 2019), and people of color have been disproportionately...
affected by COVID-19 (Hill and Artiga, 2022), which might have triggered these districts to make more hires to cover for absences and vacancies. Third, the higher rate of successful expansion observed among low-poverty districts relative to their high-poverty counterparts is likely related to the long-standing pattern of higher-poverty schools being harder to staff (García and Weiss, 2019). And finally, districts might be trying to backfill long-term shortages in some staff categories that have historical shortages that predate the pandemic, such as special education, substitute teachers, and high school teachers.

We also note that the job titles with the greatest expansion above prepandemic levels—specifically, substitute teachers, paraprofessionals, and tutors—have a direct connection to the COVID-19 pandemic (see Figure 4). Given very high demand for substitute teachers because of the pandemic, the left column of gray-shaded bars in Figure 4 shows that only 9 percent of districts nationally have not expanded nor are they still trying to expand the number of substitute teachers.
teachers they employ. As shown in the rightmost two columns of Figure 4, 58 percent of districts have already expanded the number of substitute teachers that they employ above prepandemic levels, and 76 percent of districts are still trying to expand that number, which is a strong indication of a continued national shortage of substitute teachers.

Beyond substitute teachers, other job categories with high levels of expansion above prepandemic levels include paraprofessionals and tutors. These positions, especially tutors, are scaling up to address the unfinished instruction from several years of pandemic-related disruptions to schooling. Forty-two percent of districts have already expanded the number of tutors above prepandemic levels, and 46 percent have already expanded the number of paraprofessionals. These same positions are among the top four job categories with the strongest continued demand for expansion above prepandemic levels.

Bus drivers and substitute teachers are the two job categories for which a majority of districts are still trying to expand hires. We suspect districts are still likely experiencing shortages in these job categories because of competition with other employers for low-wage workers. Workers’ health concerns about being in group settings, plus the more-onerous qualification requirements relative to other positions might also fuel these shortages.

**Roughly Half of Superintendents See a Fiscal Cliff Looming, and They Are Trying to Prepare for It**

Increasing the number of directly employed staff above prepandemic levels can increase districts’ risk of hitting a fiscal cliff when the COVID-19 federal stimulus funds that are helping districts pay for their expansion expire. A fiscal cliff can be even more likely when staffing increases are made in combination with declining student enrollment, as numerous urban districts especially have seen (Barnum, 2022b; Center on Reinventing Public Education, 2022).

District leaders have been aware of the risk of a fiscal cliff from the outset of receiving federal stimulus funds. When we first asked districts about this subject in summer 2021, 37 percent of district leaders were worried about the possibility of a fiscal cliff, which they predicted would occur right around the time federal aid is set to expire (see Figure 5) (Diliberti and Schwartz, 2021a). When we asked again in spring 2022 about their concern about a fiscal cliff, 49 percent of district leaders were worried about this possibility, although the increase from summer 2021 to spring 2022 is not statistically significant. Urban district leaders were particularly worried about a fiscal cliff back in summer 2021, and a roughly equal proportion remained concerned about this possibility in spring 2022. Leaders in the other district categories we examined have caught up to urban leaders’ concern.

For those district leaders who indicated that they were worried about the possibility of a fiscal cliff, we asked what their district was doing to try to avoid it. Eighty-seven percent of district leaders worried about a fiscal cliff said that they were taking at least one of the four actions we listed on the survey or a fifth “other” action to avoid a fiscal cliff. The most popular of these responses, which 49 percent of concerned district leaders selected, was avoiding certain staff hires to prevent later layoffs. Forty percent of concerned district leaders said they were making up-front investments with federal stimulus funds, 39 percent were boosting their rainy-day fund, and 32 percent were hiring staff as contractors or in yearly contracts to allow for flexibility. Their responses were similar to the ones they provided in summer 2021, signaling that districts have not changed course in the past school year (Diliberti and Schwartz, 2021a). We found consistent patterns in districts’ efforts to avoid the possibility of a fiscal cliff across district subgroups.
FIGURE 4
Percentage of District Leaders Reporting Expanded Hires of Various Teaching and Nonteaching Staff as of Spring 2022

| Teaching staff categories | We have not increased the number of staff, and we are not trying to do so | Current state of expanded hires | Totals |
|---------------------------|---------------------------------------------------------------------------|---------------------------------|--------|
| Substitutes               | 9                                                                         | 15                              | 43     | 58 | 76 |
| Special education         | 46                                                                        | 21                              | 17     | 34 | 38 | 33 |
| Secondary school          | 50                                                                        | 21                              | 11     | 16 | 38 | 28 |
| Elementary school         | 54                                                                        | 28                              | 11     | 6  | 38 | 19 |
| English as a Second Language | 58                                                                       | 13                              | 9      | 20 | 22 | 29 |
| Career or technical education | 61                                                                      | 14                              | 11     | 14 | 25 | 25 |
| Mathematics               | 69                                                                        | 12                              | 7      | 12 | 19 | 19 |
| English or language arts  | 71                                                                        | 12                              | 5      | 12 | 17 | 17 |
| Science                   | 74                                                                        | 11                              | 6      | 9  | 17 | 15 |
| Fully remote              | 74                                                                        | 19                              | 4      | 3  | 23 | 6  |

| Nonteaching staff categories | We have not increased the number of staff, and we are not trying to do so | Current state of expanded hires | Totals |
|------------------------------|---------------------------------------------------------------------------|---------------------------------|--------|
| Bus drivers                 | 36                                                                        | 6                               | 27     | 31 | 33 | 58 |
| Paraprofessionals           | 38                                                                        | 23                              | 22     | 17 | 46 | 39 |
| Tutors                      | 40                                                                        | 17                              | 24     | 19 | 42 | 43 |
| Janitors                    | 50                                                                        | 21                              | 13     | 15 | 34 | 29 |
| School nurses               | 51                                                                        | 27                              | 8      | 14 | 35 | 22 |
| School counselors           | 51                                                                        | 22                              | 11     | 16 | 33 | 27 |
| Social workers              | 53                                                                        | 18                              | 16     | 13 | 34 | 28 |
| Cafeteria workers           | 60                                                                        | 9                               | 18     | 13 | 26 | 31 |
| IT professionals            | 62                                                                        | 18                              | 6      | 14 | 24 | 20 |
| Other skilled workers for building maintenance | 64                                                                       | 13                              | 11     | 12 | 24 | 23 |
| School psychologists        | 66                                                                        | 11                              | 7      | 15 | 18 | 23 |
| Central office staff        | 75                                                                        | 14                              | 4      | 8  | 17 | 12 |
| HVAC-related services staff | 78                                                                        | 8                               | 7      | 7  | 15 | 14 |

NOTES: This figure depicts response data from the following survey question: “In which job categories, if any, has your district/CMO increased the number of staff for 2021–2022 compared to their pre-pandemic levels in 2019–2020?” (n = 273). Respondents had four response options: “we have not increased the number of staff, and we are not trying to do so,” “we have already increased the number of staff, and we are not trying to increase further,” “we have not yet increased the number of staff, but we are trying to do so,” or “we have already increased the number of staff, and we are trying to increase further.” (A fifth option, “we don’t employ staff in this position,” was excluded from this analysis.) Bars might not sum to totals because of rounding. HVAC = heating, ventilation, and air conditioning; IT = information technology.
FIGURE 5
Percentage of Districts Leaders Who Are Worried About a Fiscal Cliff When COVID-19 Federal Aid Expires, Spring 2022 Versus Summer 2021

NOTES: This figure depicts response data from the following survey questions: “Do you anticipate your district/CMO will hit a fiscal cliff after COVID-19 federal aid expires?” administered in summer 2021 (n = 276), and “Do you anticipate your district/CMO will hit a fiscal cliff after COVID-19 federal aid expires?” administered in spring 2022 (n = 286). The vertical black bars represent the 95 percent confidence interval for each estimate.

Three-Quarters of District Leaders Foresee a (Mostly Small) Teacher Shortage in 2022–2023; Only One-Quarter Foresee a Small Principal Shortage

Beyond the urgent shifts that schools made in the 2021–2022 school year to cover for short-term staff shortfalls due to increased teacher absences and too few substitute staff, 75 percent of district leaders foresee a longer form of teacher shortage for the 2022–2023 school year. As shown in Figure 6, most district leaders (58 percent) foresee only a small shortage, although 17 percent foresee a large shortage. (Note that we did not define “small” or “large” on our survey so these terms are open to district leaders’ interpretation.) Leaders of urban districts, rural districts, and high-poverty districts were especially likely to

“Our key focus is get hired up fast. We’ve reinforced to our school leaders: you have to be hired up going into the summer. The candidates are only going to be less high quality as the summer progresses.”

—District administrator in an ASDP case study district
foresee teacher shortages, although leaders from each of these subgroups predict mostly small shortages.

In contrast to the widespread perception of continued teacher shortages in 2022–2023, only 22 percent of district leaders foresee a principal shortage going into the next school year. And virtually all district leaders who foresee a principal shortage predict it to be a small one. There were no statistically significant differences among district subgroups in leaders’ predictions of future school principal shortages.

Teacher attrition at the end of the 2021–2022 school year will play a large role in influencing the size of the teacher shortage next year. In results not shown, 36 percent of district leaders who took our spring 2022 survey said that they were losing teachers to other districts who have increased their pay or benefits during the pandemic. Furthermore, in a recent survey conducted by our RAND colleagues (Steiner et al., 2022), roughly one-third of teachers indicated that they plan to leave their position by the end of the 2021–2022 school year, although we expect actual departure rates to be as much as 50 percent lower (Nguyen et al., 2022). In a typical school year, approximately 16 percent of teachers leave their current position; about equal proportions move to different schools as leave the profession entirely (Goldring et al., 2014).

It is difficult to guess what the actual teacher turnover rate will be at the end of the 2021–2022 school year. Although the evidence suggests that teachers have not yet left the profession in heightened numbers during the first two pandemic school years, media accounts have indicated higher-than-normal teacher attrition midstream this school year, increasing speculation that teacher turnover might have increased in this third pandemic school year.

### FIGURE 6

**Percentage of District Leaders Who Foresee Teacher and Principal Shortages in the Next School Year (2022–2023)**

| Teachers | Principals |
|----------|------------|
| Small shortage | Large shortage |
| Small shortage | Large shortage |
| Teachers | Principals |
| Urban | Suburban | Rural | Low poverty | High poverty | Majority white students | Majority students of color |
| Percentage of district leaders | 75 | 90* | 58* | 62 | 69* | 87* | 76 | 79 |
| Total | 58 | 33 | 14 | 19 | 56 | 65 | 59 | 59 |
| 19 | 31 | 18 | 18 | 18 | 24 | 23 | 20 | 21 |

NOTES: This figure depicts response data from the following survey questions: “Do you foresee a shortage of teachers in your district/CMO in the 2022–2023 school year?” and “Do you foresee a shortage of principals in your district/CMO in the 2022–2023 school year?” (n = 286). Bars might not sum to totals because of rounding. The survey questions also included an “unsure” option that was selected by less than 5 percent of respondents. An asterisk (*) indicates that the percentage of district leaders in that subgroup who indicated they expect any level of shortage in the next school year for that educator type is statistically significantly different (p < 0.05) from the percentage of district leaders not in that subgroup who said the same.
Half of District Leaders Are Still Concerned That Critical Race Theory Polarization Is Interfering with Schooling

COVID-19 safety protocols and critical race theory (CRT) became flashpoints in school board meetings and local elections, and according to many district leaders in fall 2021, political polarization of these topics began interfering with schooling (Diliberti and Schwartz, 2022). Our spring 2022 survey explored how persistent these concerns have been over the course of the 2021–2022 school year by repeating the same two questions we asked in fall 2021 about political polarization.

The percentage of district leaders who agreed or strongly agreed that polarization about CRT was interfering with schooling remained relatively steady in the 2021–2022 school year, reaching 48 percent of district leaders by spring 2022. In contrast, the percentage of district leaders who agreed or strongly agreed political polarization about COVID-19 safety protocols or vaccines was interfering with schooling declined from 74 percent in fall 2021 to 57 percent in spring 2022 (see Figure 7). We hypothesize that the decline in interference from COVID-19 polarization might be because of districts dropping mask mandates throughout the 2021–2022 school year and the more-consistent return to in-person learning (Zalaznick, 2022).

By spring 2022, district leaders’ concerns about political polarization related to COVID-19 safety protocols were at about the same rate across all the district subgroups we examined. However, leaders of low-poverty districts were more likely than their counterparts in high-poverty districts (56 percent versus 38 percent, respectively) to agree or strongly agree in spring 2022 that political polarization about CRT was interfering with their district’s ability to educate students.

In our companion report about superintendents’ job satisfaction and career plans (Schwartz and Diliberti, 2022b), 32 percent of superintendents said that political division in the community about COVID-19 made them consider leaving their position, and 17 percent said the same about CRT. Polarization about COVID-19 was the third most common out of 15 reasons we listed that have made superintendents consider leaving their position. (Job-related stress and excessive work hours were the two most common reasons.) However, even though COVID-19 polarization made roughly one-third of superintendents consider leaving, it was rarely the top reason superintendents gave for considering leaving.

“What’s made my work harder is that our leadership would get super distracted with fires—whether those fires were COVID related, whether they were socially related, whether they were politically related—making the work we were doing to keep the academic train on the tracks harder.”

—District administrator in an ASDP case study district
Concerns About Staff and Student Mental Health, Student Behavior, and Low Attendance Held Steady over the Course of the 2021–2022 School Year

Students’ mental health, behavior, and attendance surfaced as critical concerns during the disrupted 2020–2021 school year, and, according to district leaders, these concerns have not subsided. In Figure 8, we display district leaders’ responses from fall 2021 and spring 2022 to repeated questions we posed about some of the most pressing problems that schools have faced during the pandemic. In spring 2022, nine out of every ten district leaders continued to feel that both students’ and teachers’ mental health were of moderate or major concern. Likewise, about six out of every ten leaders continued to have moderate or major concern about heightened student discipline issues compared with before the pandemic began. About half of district leaders were still concerned about low student and teacher attendance.

Unsurprisingly, given the consistency of district leaders’ concerns in fall 2021 and spring 2022, we also observed similar patterns across subgroups at both points in time. For example, in both fall 2021 and spring 2022, leaders of urban districts, high-poverty districts, and districts serving mostly students of color were particularly likely to be concerned about low attendance among teachers and students. In spring 2022, urban district leaders were also most likely to report high levels of concern about enrollment declines, including families opting out of

“Attendance has been a disaster this year. Lots and lots of kids [are] taking mental health days. They don’t come to school because they don’t want to get sick. They’re still taking care of brothers and sisters or working. Or they’re not feeling engaged, and they’re kind of not going to play the game anymore.”

—District administrator in an ASDP case study district

FIGURE 7
Percentage of District Leaders Who Agreed Political Polarization Is Interfering with Schooling, Spring 2022 Versus Fall 2021

NOTES: This figure depicts response data from the following survey question: “To what extent do you agree with the following statements about your district/CMO this school year (2021–2022)?” in fall 2021 (n = 357) and in spring 2022 (n = 287). Bars might not sum to totals because of rounding.
FIGURE 8
Percentage of District Leaders Reporting Levels of Concern About Widely Reported Problems, Spring 2022 Versus Fall 2021

| Issue | No concern | Slight concern | Moderate concern | Major concern |
|-------|------------|----------------|------------------|--------------|
|       | Spring 2022 | Fall 2021 | Spring 2022 | Fall 2021 |
| **Mental health** | | | | |
| Mental health of teachers | 8 | 42 | 49 | 92 |
| Mental health of students | 8 | 37 | 55 | 91 |
| Insufficient mental health services in the community to meet my staff’s needs | 5 | 22 | 31 | 43 | 73 |
| Insufficient mental health services in the community to meet my students’ needs | 3 | 14 | 30 | 53 | 83 |
| **Student discipline** | | | | |
| Increased student discipline issues among students at school in person (relative to prepandemic levels) | 10 | 25 | 40 | 25 | 65 |
| Low attendance (relative to prepandemic levels) | 21 | 32 | 23 | 23 | 47 |
| Low attendance among teachers (relative to prepandemic levels) | 18 | 40 | 26 | 15 | 42 |
| Declined enrollment | 25 | 30 | 26 | 19 | 45 |
| Families opting out of my district and into charter schools, private schools, or homeschooling | 29 | 32 | 24 | 15 | 39 |
| Knowledge of student achievement | 30 | 33 | 28 | 10 | 38 |

NOTES: This figure depicts response data from the following survey questions: “How much of a concern are the following issues in your district/CMO this school year (2021–2022)?” in fall 2021 (n = 358) and in spring 2022 (n = 289). Bars might not sum to totals because of rounding. Some survey items had minor wording differences. (—) means that no estimates are available for fall 2021 because we did not include the item on our fall 2021 survey.
traditional public school districts in favor of charter schools, private schools, or homeschooling—the same district leaders who were most concerned about this issue when we asked a slightly differently worded question (results not shown) in fall 2021.

Because of the high rates of concern about mental health, we posed two new questions in spring 2022 about the availability of services to address mental health needs. Seventy-three and 83 percent of district leaders, respectively, were concerned about insufficient services in the community to meet the mental health needs of their staff and students. There were no differences by district subgroup in leaders’ concerns about insufficient mental health services for students and staff with one exception: Leaders of low-poverty districts were more likely than their counterparts in high-poverty districts to report insufficient mental health services for students as a moderate or major concern.

And finally, we asked district leaders whether they have sufficient data about their students’ academic performance, given that many students have struggled academically throughout the pandemic and widespread disruptions to state assessment programs (Goldhaber et al., 2022; Lewis and Kuhfeld, 2021). Across all district subgroups, roughly four in ten district leaders reported moderate or major concern about a lack of reliable data on their students’ academic performance.

Districts Have Generally Converged on the Same Interventions for Student Pandemic-Related Learning Loss

Heading into the 2021–2022 school year, district leaders were already worried about unfinished instruction from the previous two years of disruption (Schwartz and Diliberti, 2021). They are right to be concerned: A recent national analysis of students’ math and reading performance shows steep decline equivalent to 22 weeks’ worth of learning in high-poverty schools that offered only remote instruction during the pandemic (Goldhaber et al., 2022; Kane, 2022). Making up for pandemic-disrupted learning is a priority for federal relief funding and for district leaders across the country.

To learn which services school districts have offered to help students recover from the negative effects of the pandemic, we asked district leaders to select any one or more of ten options (plus an eleventh “other” option) that we listed in response to the question, “What new or expanded services, if any, has your district/CMO provided at any point in the last two years because of the pandemic?” Virtually all district leaders (98 percent) said they are offering one or more of the new or expanded services we listed on the survey. The typical district leader indicated that they offered four of the ten options from the survey.

The green shading in Figure 9 reveals that districts have generally converged on the same approaches to address pandemic-related disruptions to learning. Specifically, half or more of districts have newly offered or expanded their summer programming, mental health services for students, tutoring, social and emotional learning (SEL) instruction, and virtual schooling. About four out of every ten

“One of the things that keeps me awake at night is the long-term wear and tear of the pandemic] on adults. [There is a] pocket of folks who have just not coped very well. And it reveals itself in some really poor decisions that adults are making.”

—District administrator in an ASDP case study district, referencing racial comments a few teachers made
districts have newly offered or expanded their before-or after-school programs and mental health services for staff.

Districts have been relatively consistent in the rate at which they have adopted these reforms, with few exceptions. For example, urban districts have been particularly likely to adopt new or expanded tutoring services, virtual schools, and mental health services for staff compared with their suburban and rural counterparts. High-poverty districts have been more likely than their low-poverty counterparts to add more before- or after-school programming. And districts serving mostly students of color have expanded tutoring at higher rates than their majority-white counterparts.

“We’ve invested in a mental health and wellness facilitator for every building. The point . . . is to make sure students have access to the services they need in order for them to be able to focus on learning.”

—Superintendent in an ASDP case study district

FIGURE 9
Percentage of District Leaders Reporting Various New or Expanded Services Provided in the Past Two Years Because of the Pandemic by District Subgroup

NOTES: This figure depicts response data from the following survey question: “What new or expanded services, if any, has your district/CMO provided at any point in the last two years because of the pandemic?” (n = 283). Respondents were instructed to select all that apply. The survey question included an “Our district has not provided any of these new or expanded services because of the pandemic” option, which was selected by 2 percent of respondents, and an “other” option, which was selected by 5 percent of respondents. These results have been omitted from this figure. Numbers in bold indicate that the subgroup percentage of district leaders reporting new or expanded services is statistically significantly different (p < 0.05) from the remaining district leaders not in that subgroup who said the same.
Districts have also been consistent in which services they chose not to adopt or expand over the course of the pandemic. As shown by the yellow shading in the bottom rows of Figure 9, districts have largely foregone changes that would increase the number of instructional minutes offered to students in the fall-to-spring school year, and only a handful have experimented with learning pods. However, urban districts and districts serving mostly students of color were again more likely to add instructional minutes and intersession programming.

District Leaders Do Not Predict Growth in Virtual School Enrollment over the Next Five Years

Even though creating or expanding virtual schools has been a widespread pandemic response (Diliberti and Schwartz, 2021b), district leaders do not anticipate that a growing proportion of students will attend them.4 We asked district leaders to look ahead five years and predict what proportion of their students will be enrolled in virtual, hybrid, or fully in-person schooling. District leaders predicted that 94 percent of students will enroll in entirely in-person schooling, 3 percent in hybrid schools, and 3 percent in fully virtual schools. These predictions roughly match district leaders’ estimates of enrollment as of fall 2021, although they are slightly higher than national estimates of virtual school enrollment before the pandemic began (Hunter, Diliberti, and Schwartz, 2022; Keaton, 2021). Leaders of all district subgroups predicted similar enrollment patterns five years from now with two exceptions: high-poverty district leaders predicted slightly higher virtual school enrollment than their low-poverty counterparts (4 percent versus 2 percent, respectively), and suburban district leaders predicted lower enrollment than their urban and rural counterparts (2 percent versus 3 percent, respectively).

Ninety-One Percent of Districts Will Offer Summer 2022 Programming, up from 57 Percent in Summer 2020

The expansion of summer programming has gotten far less attention than tutoring as a remedy for unfinished instruction (Sawchuk, 2022; Walsh, 2021; Gewertz, 2022a; Gewertz, 2022b). Yet summer programming is the most-common intervention districts are taking for pandemic-related recovery, as shown in Figure 9. To document the growth in districts’ summer learning options, we asked district leaders in fall 2021 about summer school offerings in 2020 and 2021, and, in spring 2022, we asked whether they plan to offer such programming in summer 2022.

There has been a 34 percentage point increase in the proportion of districts offering summer programming throughout the pandemic period, such that, by summer 2022, nine out of ten districts will offer it (see Figure 10). We observed a large growth in summer programming over the course of the pandemic for every district subgroup we examined. We do not know how many districts offered summer programming before the pandemic began.

Implications

The results from our fall 2021 survey showed that the emerging problems widely cited by the media at
the beginning of the third pandemic school year—including staffing shortages, political divisions, and struggles to address unfinished instruction—were widespread. The results of the spring 2022 survey affirm that these problems have persisted through the 2021–2022 school year.

First, amid widespread teacher shortages in 2021–2022, over 90 percent of districts nationally have changed one or more school operations, such as increasing pay for in-demand roles, temporarily adding to teachers’ duties, combining classes or canceling planning periods, and converting school from in-person to remote instruction at various points. Staff shortages have persisted despite 77 percent of districts having increased their teaching staff above prepandemic levels. Looking ahead to the next school year, 75 percent of district leaders foresee a continued shortage of teachers, although most of them believe the shortage will be small. Half of districts have forecast facing a fiscal cliff likely due to their staff expansions.

Second, district leaders’ various pandemic-related concerns about schooling have remained high throughout the 2021–2022 school year. As of spring 2022, nine out of ten district leaders remain concerned about student and staff mental health, about half agreed that political polarization about CRT is interfering with their district’s ability to educate students, and about one-half to two-thirds of leaders were still concerned about school attendance and student behavior. Out of all the concerns we asked about, only interference caused by the political polarization of COVID-19-related safety protocols faded somewhat over the course of the 2021–2022 school year. This might be the result of many districts ending their mask mandates during this period.

Despite these ongoing challenges, a clearer picture has emerged about how districts are trying to remedy the negative effects from unfinished instruction due to the pandemic. Specifically, a majority of districts have converged on adding or expanding the following five services shown in descending order of
Prevalence: summer programming, mental health services for students, tutoring, SEL instruction, and hosting a virtual school. Enrollment trends over the course of the pandemic and district leaders’ projections about virtual school enrollment indicate that there will likely be larger growth in summer enrollment over time than in virtual schools. Indeed, in our view, the marked increase from 57 to 91 percent over the past three summers in the number of districts nationally offering summer programming merits greater research and policy guidance attention than it has yet received.

In light of these trends, we offer the following recommendations.

Recommendations About Interventions to Address Pandemic-Disrupted Learning

Now that it has become clearer just how disruptive the pandemic has been to student learning, districts need to keenly focus on the high-quality implementation of their interventions to address learning loss at scale. This is no easy task. To do so, districts need to first identify the extent of the learning gaps for different subsets of their students to figure out where to target the most-intensive responses. Districts then need to invest time and resources into effectively implementing the academic interventions that they have already adopted, such as tutoring, summer learning, and SEL. To take the example of summer learning programs, simply adding more enrollment slots for summer programming is not enough to achieve quality at scale. A five-city study of summer programs shows that, to reap the academic benefits, students need to attend, and there must be at least three to four hours of academic programming per day in at least a five-week program (Schwartz et al., 2018). Furthermore, districts needed a summer program director with at least 50 percent protected time to design and manage the summer program, starting about six months in advance of the summer program.

Because districts have generally converged on the same set of interventions to address pandemic-disrupted learning, professional associations of districts, regional education service centers, and state education agencies can play an important role in creating forums for district leaders to disseminate their valuable knowledge with peers working in similar contexts.

Superintendents can rally their mayors, representatives from local hospital and health care systems, and legislators to discuss and implement a coordinated set of mental health services for their students and staff. Effectively increasing access to mental health services for students and staff will likely vary substantially by context. In areas in which mental health professionals are in short supply, it might even involve creative longer-term approaches, such as grow-your-own programs for mental health professionals in schools and partnerships with national programs, such as the National Health Service Corps or U.S. Department of Health and Human Services–funded training for community health workers who could potentially be placed in schools (White House, 2022).

Recommendations About the Fiscal Cliff

State education agencies should seek to get out ahead of a fiscal cliff by working with districts to closely examine finances, staff levels, and enrollment projections to understand which districts have the greatest risk of facing a fiscal cliff and work to minimize or avoid such risk.

Likewise, peer networks of regional and state professional associations of superintendents can keep awareness high and share how district leaders are working to minimize or avoid risks associated with fiscal cliffs.

Even though many of the challenges that district leaders face, such as political polarization and pervasive mental health concerns, can exceed their control, they can still act. They can focus intently on intensive responses to address students’ mental health and academic learning, and they can share information with each other and their state education agencies to both provide support and spread successful ideas as they head into the 2022–2023 school year.
Index calculator.

Inflation, we used the U.S. Bureau of Labor Statistics’ Consumer Price Index calculator.

In summer 2021, we asked district leaders detailed questions about virtual schools and found a ninefold increase in the percentage of districts that offer students the option to enroll in virtual schools.

1 Invitations were sent to district superintendents (or their previously specified designee) who could complete the survey themselves or designate another leader (or leaders) to complete the survey on behalf of their district or CMO. Most surveys (83 percent) were completed by the district’s superintendent, whereas 5 percent were completed by an assistant or associate superintendent, 6 percent were completed by the district’s research director, and the remaining 6 percent were completed by personnel with other job titles. Multiple leaders in a district might also have worked together to complete the survey on behalf of their district or CMO.

2 All quotes from district leaders in this report were collected in semistructured interviews by our partner, Center on Reinventing Public Education, as part of its ongoing ASDP qualitative case studies.

3 To adjust substitute teachers’ wages and retail trade workers’ wages for inflation, we used the U.S. Bureau of Labor Statistics’ Consumer Price Index calculator.

4 In summer 2021, we asked district leaders detailed questions about virtual schools and found a ninefold increase in the percentage of districts that offer students the option to enroll in virtual schools.

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How This Analysis Was Conducted and Limitations

RAND Corporation researchers fielded the fifth survey of the ASDP from February 28, 2022, through April 10, 2022.

Researchers randomly sampled districts and CMOs to invite them to enroll in the ASDP. All enrolled districts were invited to complete this survey. Of the 1,032 districts and CMOs that enrolled in the panel between fall 2020 and spring 2022, 291 district leaders completed surveys on behalf of their districts (28.2 percent completion rate). Responses reflect district leaders’ perceptions, which might or might not align with districts’ actual experiences. Also, respondents might not have consistently interpreted terms on the survey, such as “major concern” or “small shortage,” which could affect how they completed survey items.

Survey responses have been weighted to be representative of the national population of public school districts, not the national population of public school students. Students are not evenly distributed across school districts. More specifically, among the population of 13,000 school districts in the United States, only 9 percent are urban, whereas 25 percent are suburban and 66 percent are rural (Grant et al., 2022). Yet roughly 30 percent of the nation’s 50 million public school students are enrolled in urban districts (National Center for Education Statistics, undated-a), and the nation’s 120 largest school districts—many of which are urban—alone account for roughly 20 percent of all student enrollment (National Center for Education Statistics, undated-b). In our sample, urban districts have an average enrollment size of 38,600 students, whereas rural districts have an average enrollment of 1,500 students. Thus, although rural district leaders represent a majority of school districts, they do not represent a majority of public school students. Accompanying technical documentation provides more information about the weighting procedures (Grant et al., 2022).

Because districts’ experiences vary, we examined differences in district leaders’ responses by district characteristics. We obtained the data on district characteristics by linking survey data files to the 2020–2021 Common Core of Data (CCD) issued by the National Center for Education Statistics. We also used some data from the 2019–2020 school year, given lower-than-normal levels of data quality on student poverty status in the 2020–2021 CCD. We analyzed the following four categories that yield ten subgroups:

1. locale (urban, suburban, and rural)\textsuperscript{a}
2. student racial and ethnic composition (we categorize districts in which more than half of students are Black, Hispanic, Asian, Pacific Islander, American Indian/Alaska Native, or of two or more races as having \textit{majority students of color}, with the remaining districts categorized as having \textit{majority white students})
3. district poverty level (districts in which half or more of students qualify for a free or reduced-price meal are categorized as \textit{high poverty}, whereas the remainder are categorized as \textit{low poverty})
4. district size (districts with fewer than 3,000 students are categorized as small; districts with 10,000 or more students are categorized as large; and the remaining districts are categorized as medium).

In this report, we do not separately analyze differences between traditional public districts and CMOs due to the small number of CMO leaders who completed our surveys. To see the full set of survey results by district subgroups (including estimates for the 14 CMOs), visit our Interactive Survey Results Tool at www.americanschooldistrictpanel.org/survey-results.

It is important to keep in mind that each district in the survey belongs to four of the ten subgroups—for example, a single school district that is large, suburban, low poverty, and enrolls mostly white students. Thus, patterns observed across district size, locale, poverty status, and student racial and ethnic composition might be driven by the same set of districts that share multiple characteristics.

In this report, we describe only those differences among district subgroups that are statistically significant at the 5 percent level, unless otherwise noted. For all spring 2022 survey estimates, we conducted significance testing to assess whether subgroups were statistically different at the $p < 0.05$ level. Specifically, we tested whether the percentage of district leaders in one subgroup reporting a response was statistically different from the remaining district leaders who took the survey (e.g., leaders of urban districts versus other respondents who did not lead an urban district). However, we did not conduct formal significance testing of differences across survey waves (e.g., comparing district leaders’ responses on survey items from summer 2021 and fall 2021 versus spring 2022) because of a lack of longitudinal survey weights that properly account for the partial overlap in respondents and changes in representativeness of survey respondents across years. Estimates for each survey are separately produced using cross-sectional survey weights designed specifically to provide nationally representative estimates at the time point at which the survey was administered. When feasible, we include confidence intervals when comparing across time points to help readers interpret changes over time. Nevertheless, comparisons across time points should be made with caution. Furthermore, because of the exploratory nature of this study, we did not apply multiple hypothesis test corrections.

a Our locale definition aligns with the four-category locale definition used by the National Center for Education Statistics, with the exception that we collapsed the districts located in towns into the rural category for sample size reasons.
About This Report

The American Educator Panels (AEP) are nationally representative samples of teachers, school leaders, and district leaders across the country. The American School District Panel (ASDP) is a partnership among the RAND Corporation, the Center on Reinventing Public Education, Chiefs for Change, the Council of the Great City Schools, and Kitamba. For more information, please visit the ASDP website at www.americanschooldistrictpanel.org.

To obtain a national picture of districts’ challenges at the end of the third pandemic school year, we surveyed 291 district and charter network leaders in the ASDP from February to April 2022.

We are extremely grateful to the educators who have agreed to participate in the panels. Their time and willingness to share their experiences are invaluable for this effort and for helping us understand how to better support their hard work in schools. We also thank Betheny Gross and Christine Mulhern for helpful feedback that greatly improved this report. We also thank Chris Anthony for her editorial expertise and Monette Velasco for overseeing the publication process for this report.

RAND Education and Labor

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More information about RAND can be found at www.rand.org. Questions about this report or about the ASDP should be directed to hschwartz@rand.org, and questions about RAND Education and Labor should be directed to educationandlabor@rand.org.

About the Data Note Series

This Data Note series is intended to provide brief analyses of survey results of immediate interest to policymakers, practitioners, and researchers. If you would like to know more about the data set, please visit Technical Documentation for the Fifth American School District Panel Survey (RR-A956-11, www.rand.org/t/RR-A956-11) for more information on survey recruitment, administration, and sample weighting. If you are interested in using AEP data for your own surveys or analysis or in reading other AEP-related publications, please email aep@rand.org or visit www.rand.org/aep.

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