



RESEARCH BRIEF

District Concerns About Academic Learning During the COVID-19 Pandemic

Jordan Rickles | Sarah Hodgman | Joanne Carminucci | Mike Garet

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In spring 2020, the COVID-19 pandemic led schools across the country to close their doors and transition to distance learning. One year later—in spring 2021—districts continued to adapt to the persistent and evolving challenges of schooling during the pandemic. With variations in state guidelines and community needs, the importance of understanding the education landscape across the United States is greater than ever.

The American Institutes for Research (AIR) launched two national surveys to better understand how school districts across the country have responded to the pandemic. The first [National Survey of Public Education's Response to COVID-19](#) was sent to leaders in approximately 2,500 school districts in May 2020 and received 753 responses.¹ Results from the first survey appear in a collection of research briefs published between July 2020 and April 2021, which are available on the [project page](#). The second survey was sent to the same sample of 2,500 leaders, as well as an additional 10,000 districts that were not included in the original survey sample. Administration took place between late January and early April 2021, with 565 districts responding from 46 states.²

While the survey response rate is low, observed characteristics of the responding districts reflect average characteristics of the national district sample. In addition, our survey results on the prevalence of in-person instruction are consistent

About This Brief

- This brief examines public school district leaders' concerns about student academic learning during the 2020–21 school year.
- About two in five district leaders reported that their teachers covered all the content they normally would in fall 2020. Content coverage was especially challenging for districts that were not providing primarily in-person instruction in fall 2020 and for those serving mostly students of color.
- Fewer than one in five district leaders reported a substantial increase in the percentage of students in Grades K–8 performing below grade level in fall 2020, compared with fall 2019.
- About one third of district leaders (34%) reported a substantial increase in the percentage of high school students receiving poor grades. This increase was more pronounced in districts serving mostly students of color and in districts that historically served students with lower achievement.
- About a quarter of district leaders reported that they had substantially increased their use of tutoring or supplemental instruction this year to address gaps in learning.
- These findings highlight concerns that the COVID-19 pandemic has exacerbated disparities in student learning across districts and reinforces the importance of supporting districts most affected by the pandemic during the 2020–21 school year.

with findings from the Institute of Education Sciences' [School Survey Dashboard](#), providing reassurance that our survey sample is a reasonable representation of districts across the country.

In this brief, we present survey responses that highlight concerns about student academic learning during the 2020–21 school year. Our hope is that these results inform efforts to address potential gaps in learning in the years to come.

Introduction

As the COVID-19 pandemic pushed schools across the country to adopt remote instruction during spring 2020, concerns about the implications for student learning mounted. Early projections of what months of remote instruction would mean for student learning were bleak, with the expectation that students would start the 2020–21 school year far behind where they should be. The outlook was even worse for students from low-income families and students of color (Dorn, 2020a; Kuhfeld, Soland, et al., 2020).

As the 2020–21 school year started, school districts continued to grapple with how to teach students during a pandemic, as evidence about the pandemic's effects on students' academic learning started to trickle in from various sources. As expected, students started the 2020–21 school year behind where they normally would be (Dorn, 2020b). While student learning picked back up during the fall semester for many (Domingue et al., 2021), significant gaps in learning persisted (Pier et al., 2021; Curriculum Associates, 2021; Kuhfeld, Tarasawa, et al. 2020). In addition, the pandemic appears to have been more detrimental to academic learning among traditionally underserved populations, raising concerns about exacerbating preexisting educational disparities (Pier et al., 2021; Curriculum Associates, 2021).

The [National Survey of Public Education's Response to COVID-19](#) provides more evidence of how student academic learning was hindered during the pandemic by describing how district leaders saw instruction and learning play out in their schools. Given the serious concerns about how the pandemic and remote instruction disproportionately affected traditionally underserved communities, this brief pays particular attention to how district leaders' perceptions of student academic learning differed across districts that were providing primarily in-person instruction or not in fall 2020, as well as districts serving different communities.⁴ The results presented in this brief are purely descriptive in nature. We cannot attribute differences across districts to the use of in-person instruction or to specific district characteristics, especially because, as described in our [brief on instructional approaches](#) (Hodgman et al., 2021), the prevalence of in-person instruction in fall 2020 was associated with district characteristics.

Classifying District Instruction

"Primarily in-person instruction" = more than 75% of students received all or most of their instruction in person.³ This includes fully in-person instruction as well as hybrid instruction where "most" instruction took place in person.

"Not primarily in-person instruction" = at least 25% of students received remote instruction. This includes fully remote instruction as well as hybrid instruction where "most" instruction took place remotely or instruction was equally divided between remote and in-person delivery.

Content Coverage During Fall 2020

Earlier briefs in this series have already addressed how the [mode of instruction differed across districts](#) (Hodgman et al., 2021) and how [student attendance rates differed across districts](#) (Carminucci et al., 2021). Both factors could influence student learning. Another way in which the pandemic could slow student learning is by hindering the amount of content teachers are able to cover during instructional time. To examine this, we asked district leaders whether their teachers were able to cover all the course content they normally would during fall 2020.

Overall, about two in five district leaders reported that most or all of their teachers covered all the content they normally would in fall 2020 (40% for Grades K–5 and 38% for Grades 6–12). Content coverage was especially challenging for districts that were not providing primarily in-person instruction in fall 2020. In districts that provided primarily in-person instruction, about 60% of leaders said that most teachers covered the content they normally would, compared with about 22% of leaders in districts that did not provide primarily in-person instruction. While this disparity is telling, many leaders of districts that provided primarily in-person instruction nonetheless expressed concerns about content coverage, which suggests that challenges posed by the pandemic cannot be overcome simply by opening school buildings back up.

In addition, there were significant disparities in reported content coverage based on a district’s location and the students served (see Figure 1). District leaders were less likely to report that their teachers covered all the content they normally would in city or suburban districts (compared with town or rural districts), in districts serving mostly students of color, in districts with a high percentage of English learners (ELs), and in historically low-achieving districts. These disparities in content coverage existed at both the elementary and secondary levels.

“Teachers were encouraged to focus on essential learning and skill development ... and focusing on student connections and wellness.”

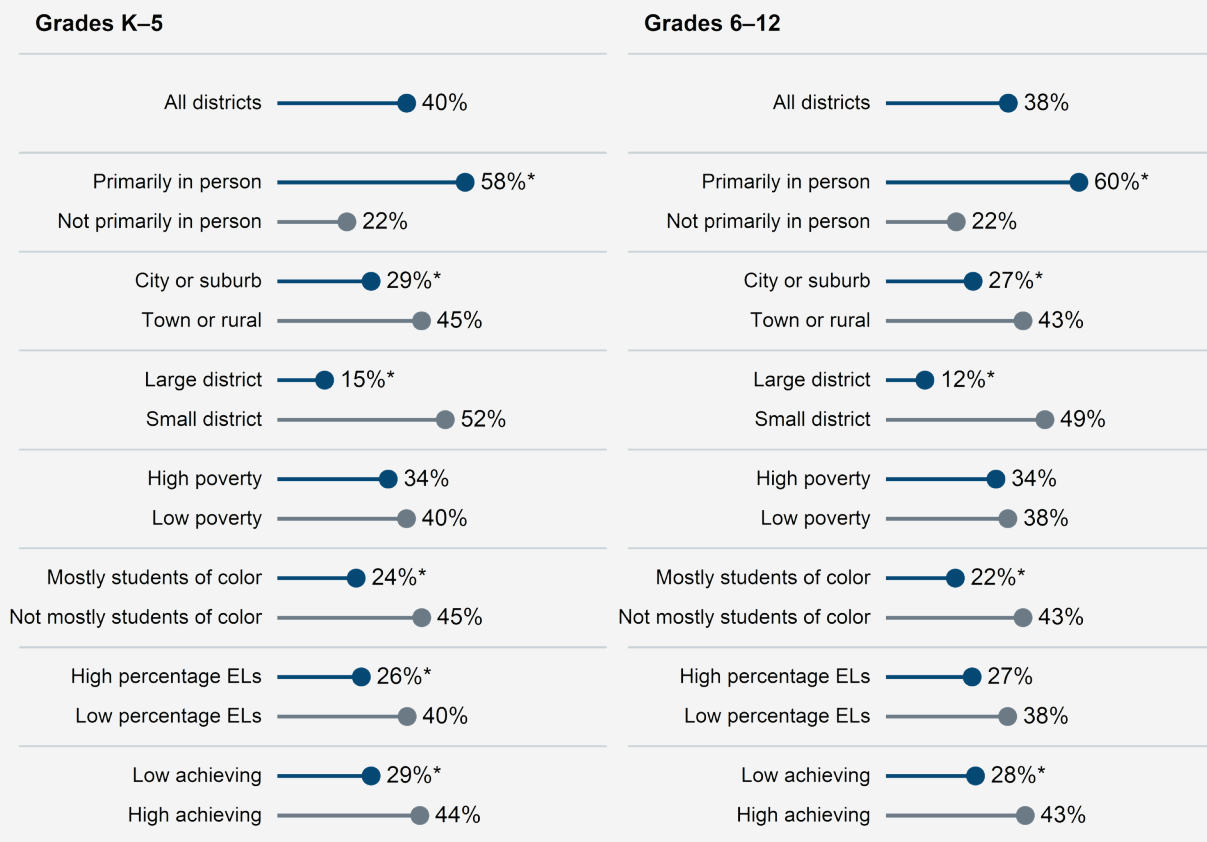
– District leader from a rural district that provided primarily in-person instruction

“We asked teachers to focus on the core academic standards during their limited instructional time.”

– District leader from an urban district that did not provide primarily in-person instruction

For both elementary and secondary grades, difficulty teaching certain content remotely was the most common reason district leaders gave for teachers not covering all the content they normally would. In addition to this challenge, about half of the district leaders listed the following three barriers to delivering normal content coverage during fall 2020: Teachers had less time for instruction, teachers spent more time reviewing content they should have learned earlier, and teachers taught at a slower pace.

Figure 1. Percentage of Districts Reporting That Most or All of Their Teachers Covered All the Content They Normally Would in Fall 2020, by District Characteristics



* Difference between district groups was statistically significant ($p < .05$).

Note. The figure represents the percentage of districts reporting that “most or all teachers” covered all the content they normally would during fall 2020, compared with fall 2019. Other response options were “few teachers,” “some teachers,” and “many teachers.”

Sample sizes (left panel): All districts = 533, Primarily in person = 248, Not primarily in person = 285, City or suburb = 166, Town or rural = 367, High poverty = 162, Low poverty = 146, Mostly students of color = 138, Not mostly students of color = 394, High percentage of ELs = 99, Low percentage of ELs = 351, Low achieving = 173, High achieving = 174.

Sample sizes (right panel): All districts = 529, Primarily in person = 209, Not primarily in person = 318, City or suburb = 166, Town or rural = 363, High poverty = 159, Low poverty = 148, Mostly students of color = 132, Not mostly students of color = 396, High percentage of ELs = 96, Low percentage of ELs = 350, Low achieving = 168, High achieving = 172.

Concerns About Academic Performance During the 2020–21 School Year

To gauge the extent to which district leaders were concerned about the pandemic affecting student learning, we asked whether each of the following were about the same, a little higher, or substantially higher in 2020–21, compared with the previous year: (a) the percentage of students in Grades K–8 performing below grade level in reading, (b) the percentage of students in Grades K–8 performing below grade level in mathematics, and (c) the percentage of students in Grades 9–12 receiving D or F grades in their classes.

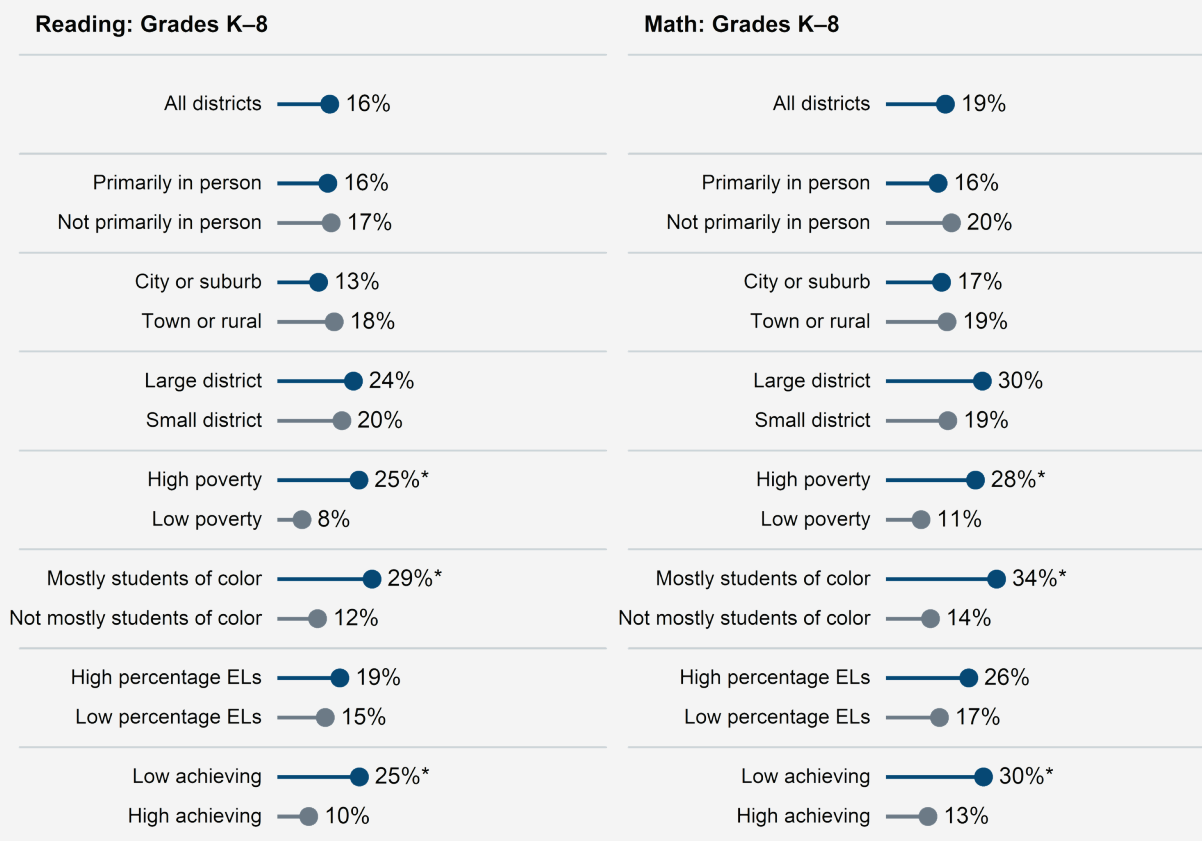
In Grades K-8, fewer than one in five district leaders reported a substantial increase in the percentage of students performing below grade level (see Figure 2). There were no differences between districts that were providing primarily in-person instruction and those relying more on remote or hybrid instruction. However, there were meaningful differences based on the types of students districts serve. In particular, a substantial increase in the percentage of students performing below grade level was more prevalent among districts where more families live in poverty, districts that served mostly students of color, and districts that were historically lower achieving. For example, 34% of district leaders from districts serving mostly students of color reported a substantial increase in the percentage of students performing below grade level in mathematics, compared with 14% of district leaders from districts where the majority of students were White.

In Grades 9-12, about a third of district leaders (34%) reported a substantial increase in the percentage of students receiving poor grades (see Figure 3). Districts that were not providing primarily in-person instruction were more likely to report an increase in the percentage of students receiving poor grades, compared with districts that were providing primarily in-person instruction (44% versus 19%). In addition, a substantial increase in the percentage of students receiving poor grades was more prevalent among districts that served mostly students of color and districts that were historically lower achieving. While grades may be a crude marker for academic learning, an increase in poor grades sheds light on how the pandemic changed academic conditions for high school students.

“We have many more [high school] students who have not passed classes and thus did not earn course credits required for graduation.”

– District leader from a suburban district that was not providing primarily in-person instruction

Figure 2. Percentage of Districts Reporting That a Substantially Higher Percentage of K–8 Students Performed Below Grade Level in 2020–21 Compared With the Previous Year, by District Characteristics



* Difference between district groups was statistically significant ($p < .05$).

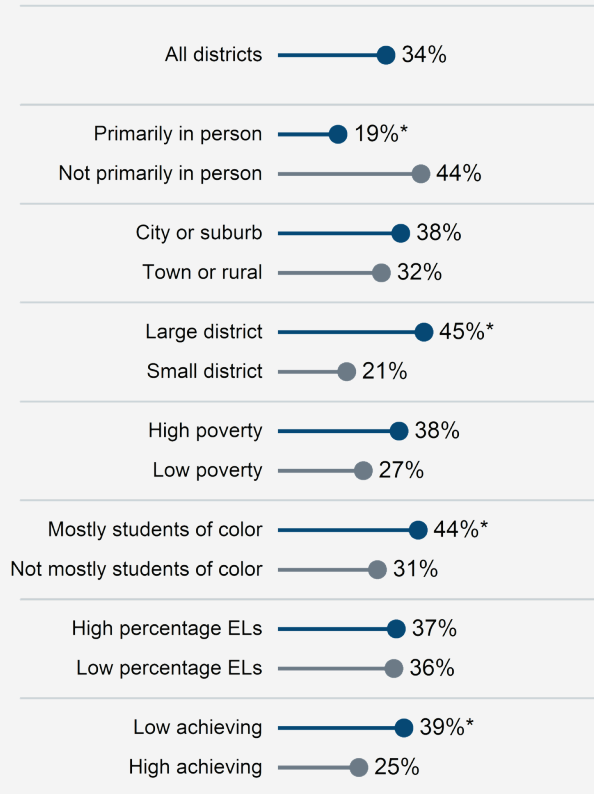
Note. The figure represents the percentage of districts reporting that the percentage of students in Grades K–8 who were performing below grade level in reading or mathematics was “substantially higher” in 2020–21, compared with the previous school year. Other response options were “a little higher” and “about the same or lower.”

Sample sizes (left panel): All districts = 505, Primarily in person = 205, Not primarily in person = 300, City or suburb = 157, Town or rural = 348, High poverty = 152, Low poverty = 136, Mostly students of color = 131, Not mostly students of color = 373, High percentage of ELs = 95, Low percentage of ELs = 330, Low achieving = 162, High achieving = 165.

Sample sizes (right panel): All districts = 506, Primarily in person = 206, Not primarily in person = 300, City or suburb = 157, Town or rural = 349, High poverty = 153, Low poverty = 136, Mostly students of color = 132, Not mostly students of color = 373, High percentage of ELs = 96, Low percentage of ELs = 330, Low achieving = 163, High achieving = 165.

Figure 3. Percentage of Districts Reporting That Substantially More High School Students Received Poor Grades in 2020–21 Compared With the Previous Year, by District Characteristics

Grades 9–12



* Difference between district groups was statistically significant ($p < .05$).

Note. The figure represents the percentage of districts reporting that the percentage of students in Grades 9–12 who received D or F grades in their courses was “substantially higher” in 2020–21, compared with the previous school year. Other response options were “a little higher” and “about the same or lower.”

Sample sizes. All districts = 449, Primarily in person = 185, Not primarily in person = 261, City or suburb = 125, Town or rural = 324, High poverty = 137, Low poverty = 114, Mostly students of color = 107, Not mostly students of color = 341, High percentage of ELs = 72, Low percentage of ELs = 310, Low achieving = 135, High achieving = 139.

Expansion of Tutoring or Supplemental Instruction to Address Gaps in Student Learning

One way in which districts can address disruptions to student learning is to expand the use of tutoring or supplemental instruction. To gauge the extent to which districts started providing more tutoring or supplemental instruction during the 2020–21 school year, we asked district leaders whether—compared with the previous year—they offered a little more tutoring or supplemental instruction, offered substantially more tutoring or supplemental instruction, or did not expand the use of tutoring or supplemental instruction.

Overall, only about a quarter of district leaders reported that they offered substantially more tutoring or supplemental instruction in 2020–21 than in the previous year. For Grades K–5, the expansion of tutoring or supplemental instruction differed significantly by instruction status (primarily in person or not) but not by district characteristics. For Grades 6–12, there were more meaningful differences (see Figure 4). In particular, a greater percentage of districts with the following characteristics reported offering substantially more tutoring or supplemental instruction to secondary grade students: districts that were not providing primarily in-person instruction, larger districts, districts that served mostly students of color, and districts that were historically lower achieving.

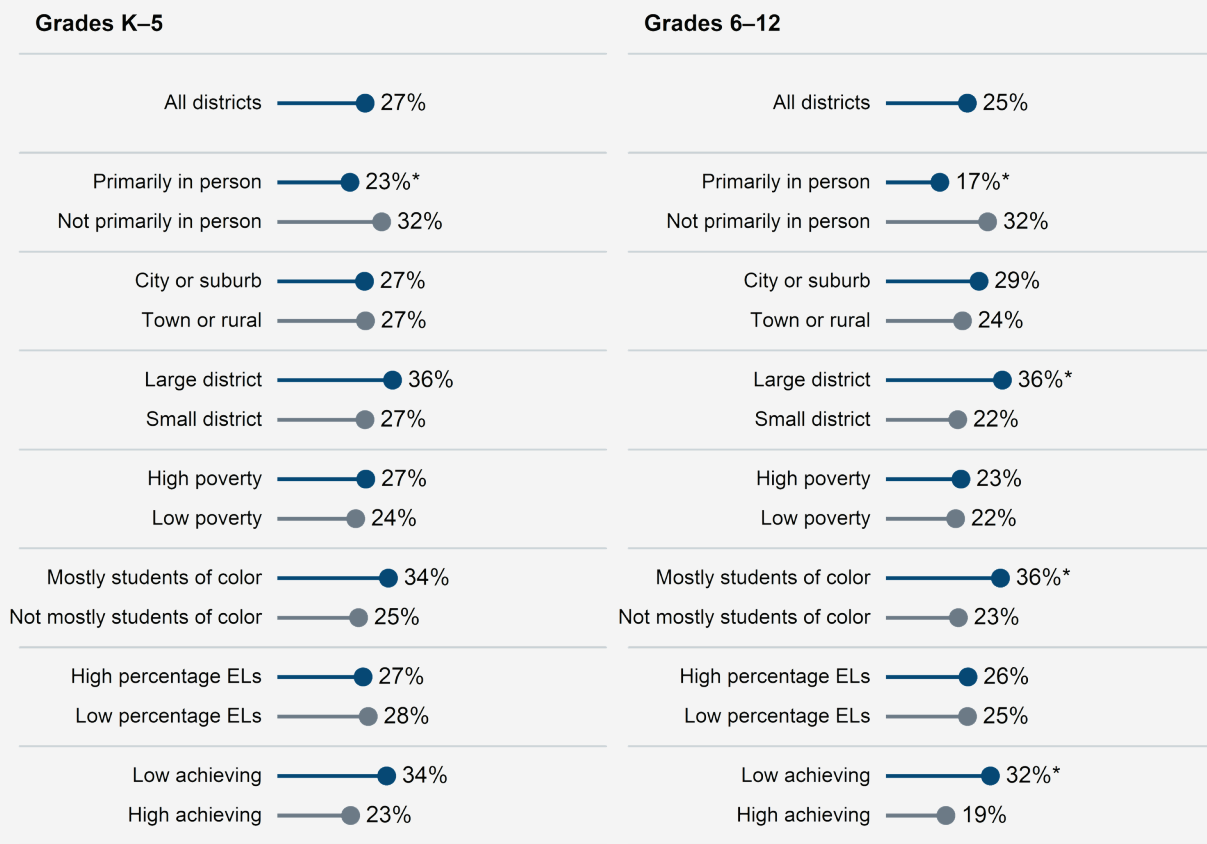
“Targeted intervention to ensure students end the year at or above grade level is going well. We anticipate students not showing marked learning loss by the end of the year.”

– District leader from a suburban district that was not providing primarily in-person instruction

“We now have an Academic Compliance Counselor that tracks student progress in grades 7-12 to ensure they are meeting their academic goals and staying on track. This person counsels and assigns tutoring as needed for students that fall behind or need additional support.”

– District leader from a rural district that was not providing primarily in-person instruction

Figure 4. Percentage of Districts Offering Substantially More Tutoring or Supplemental Instruction in 2020–21 Compared With the Previous Year, by District Characteristics



* Difference between district groups was statistically significant ($p < .05$).

Note. The figure represents the percentage of districts that reported offering “substantially more” tutoring or supplemental instruction to bolster student learning in the 2020–21 school year, compared with the previous school year. Other response options were “a little more” and “did not expand tutoring or supplemental instruction.”

Sample sizes (left panel): All districts = 507, Primarily in person = 235, Not primarily in person = 271, City or suburb = 158, Town or rural = 349, High poverty = 152, Low poverty = 138, Mostly students of color = 132, Not mostly students of color = 374, High percentage of ELs = 96, Low percentage of ELs = 331, Low achieving = 162, High achieving = 167.

Sample sizes (right panel): All districts = 506, Primarily in person = 199, Not primarily in person = 304, City or suburb = 158, Town or rural = 348, High poverty = 151, Low poverty = 142, Mostly students of color = 127, Not mostly students of color = 378, High percentage of ELs = 94, Low percentage of ELs = 332, Low achieving = 157, High achieving = 167.

Conclusion

The survey results presented in this brief amplify alarms raised by educators, policymakers, and researchers that the COVID-19 pandemic has exacerbated disparities in student learning across districts. In particular, concerns among district leaders about content coverage and worsening student performance were most pronounced in districts where students of color are the majority and in districts that are historically lower achieving. To effectively address the pandemic's disruption of student learning, it will be crucial to continue identifying and monitoring the districts in greatest need of resources and support for years to come. While our survey only allows us to examine differences in district leaders' perceptions of learning opportunities across districts, policymakers and education leaders should also consider the extent to which the pandemic has affected disparities in learning among schools and students within the same district. Efforts to recover from the pandemic will be incomplete if inequities between and within districts are not addressed.

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Endnotes

¹AIR funded and led the development of the first survey, which was administered by our partner NORC at the University of Chicago. We sent the survey to school districts in every U.S. state and Washington, D.C. The sample contained 2,536 districts, stratified by state (for districts in 12 focal states) or region (for districts in the remaining states) and by locale (urban, suburban, town, and rural). Within these strata, districts were drawn with probability proportional to the square root of enrollment. Large districts were drawn with certainty. The survey was open between May 20 and September 1, 2020, and 753 districts responded during that time. Results were weighted to adjust for nonresponse in the 64 state- or region-by-locale strata. More information about the 2020 survey methodology is available in the [Preliminary Technical Supplement](#).

²AIR also funded and led the development of the second survey, which was administered by our affiliate IMPAQ International, LLC. We initially sent the survey to the same 2,536 districts described above. Two months into the administration period, we sent the survey to the remaining 10,056 districts in our sampling universe in an effort to increase our sample size. The survey was open between January 26 and April 7, 2021, and 565 districts responded during that time. Results were weighted to adjust for nonresponse. More information about the 2021 survey methodology is available in the [Technical Supplement](#).

³In the survey, we asked district leaders to report the percentage of students who received each type of instruction in winter 2021 (approximately the last week of January): in-person instruction only, hybrid with more in-person instruction, hybrid with equal in-person and remote instruction, hybrid with more remote instruction, and remote instruction only. This question was asked for each grade bracket offered by the district. For fall 2020, we asked district leaders “about how many students received all or most of their instruction in person” in the first month of the 2020–21 school year. This question was asked for each grade bracket offered by the district, with response options as follows: no students, some students (1%–25%), many students (26%–75%), or all or almost all students. For analyses where instructional mode is presented for Grades K–12 combined, we identified districts as “primarily in person for all grades offered” if their responses met the preceding criteria (more than 75% of students received all or most of their instruction in person) across every grade bracket offered in their districts.

⁴We defined district characteristics as follows:

- **Locale.** Based on four locale categories (city, suburb, town, and rural) determined by the U.S. Department of Education (2019). We combined city with suburb, and town with rural.
- **Size.** Based on district enrollment data provided by the U.S. Department of Education (2019). Small = <1,000 students; Medium = 1,000 to <10,000 students; Large = 10,000 or more students.
- **Poverty.** Based on child poverty data provided by the U.S. Census Bureau (2019). Low = <10% of children; Medium = 10% to <20% of children; High = 20% or more of children.
- **Racial Composition.** Based on student demographic data provided by the U.S. Department of Education (2019). Mostly students of color = >50% non-White students; Not mostly students of color = 50% or fewer non-White students.
- **Concentration of English Learners.** Based on student demographic data provided by the U.S. Department of Education (2019). Low = <10% of students; High = 10% or more of students.
- **Historic District Achievement.** Based on achievement data for Grades 3–8 from 2008–09 to 2015–16 provided by the Stanford Education Data Archive (Reardon et al., 2019). The pooled achievement indicators draw from student performance records in English language arts and mathematics. Cutoffs for low, medium, and high achievement were determined using tercile calculations on the survey sampling frame (N=13,281 districts).



1400 Crystal Drive, 10th Floor
Arlington, VA 22202-3289
+1.202.403.5000 | AIR.ORG

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