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# Teaching and Leading Through a Pandemic

## Key Findings from the American Educator Panels Spring 2020 COVID-19 Surveys

Educators and students in schools across the United States have faced sweeping, unprecedented changes to teaching and learning as a result of the coronavirus disease 2019 (COVID-19) pandemic, which shuttered school buildings in spring 2020. This Data Note offers teachers' and principals' perspectives on some of those changes and presents their implications for education policymakers and practitioners. Drawing on the RAND Corporation's American Educator Panels (AEP), researchers surveyed nationally representative samples of K–12 public school teachers and principals in late April and early May 2020 to document how they delivered instruction and other services, what supports and resources they needed, and what their expected priorities and plans were for the 2020–2021 school year. At the time the survey was fielded, the effects of the pandemic were already in full force: According to the principals and teachers we surveyed, most K–12 public schools in the United States closed during the two-week period in the latter part of March. However, nearly all the teachers who responded to our surveys reported being employed and paid for the same number of hours as before school closures.

We address the following key topics:

- distance learning and curriculum coverage during school closures
- principals' perceptions of school challenges and needs
- school and teacher contact with families and students
- teacher training on remote instruction
- teachers' needs for additional support
- priorities and plans for the summer and next school year.

Schools and districts across the nation have responded in a variety of ways to the COVID-19 pandemic, depending on their resources and populations. Differences in the quality of supports provided during the COVID-19 pandemic stemmed to some degree from preexisting differences in access to such resources as high-speed internet and computing devices (e.g., laptops or tablets) (Center on Reinventing Public Education, undated-b). The shift to remote learning has the potential to widen inequities in students' access to high-quality educational supports (National Academies of Sciences, Engineering, and Medicine, 2019). In addition, the typical elementary school provides different learning opportunities and faces a different set of challenges than the typical middle or high school (Polikoff, 2020).

To capture potential inequities and the various responses to school closures, we examined differences for several teacher and principal subgroups. We examined results for principals and teachers serving elementary versus secondary grade levels, and we conducted comparisons using several school-level variables, including school urbanicity, school racial/ethnic composition, and school poverty (based on student eligibility for free or reduced-price meals). (See the "How We Conducted These Analyses" section at the end of this Data Note for definitions of the subgroups used in these analyses.) In the interest of focusing on a small set of key findings, we omitted some potentially valuable results, including the full range of subgroup differences that we found. We will present some of these findings in future reports.[1]

The AEP's high-quality, probability-based sampling and weighting procedures enable us to provide the first nationally representative data from both teachers and principals regarding their experiences with the effects of the COVID-19 pandemic in spring 2020. Our data complement the work of other organizations, including a systematic review of school districts' and charter management organizations' websites conducted by the Center on Reinventing Public Education (Center on Reinventing Public Education, undated-b), a tracking survey by *Education Week* that monitors teachers' and district leaders' experiences (*Education Week*, 2020), and analyses of parents' experiences conducted by the Center for Economic and Social Research at the University of Southern California (University of Southern California, undated). Information about these and other survey efforts is available through the Center on Reinventing Public Education (Center on Reinventing Public Education, undated-a).

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[1] A full set of survey results and technical documentation is provided in Hamilton et al., 2020; the data files will be available to download from the AEP data portal by the end of June 2020 (RAND Corporation, undated) to enable others to conduct analyses.

## Almost All Schools Required Students to Complete Distance Learning Activities, but Teachers Reported Wide Variation in Curriculum Coverage and Approaches to Monitoring Student Progress

The survey defined *distance learning* as any instructional materials, resources, and other supports schools provide to students while school buildings are closed. Distance learning can include online instruction as well as the provision of hard-copy materials (e.g., packets of lessons, worksheets).

We first examine how teachers provided feedback on student work and the extent to which teachers indicated that students completed the intended curriculum. Virtually all teachers and principals reported offering distance learning to students, but the reported approaches to monitoring and providing feedback varied. Approximately 80 percent of teachers indicated that they required students to complete assigned learning activities, although only one-third were issuing letter grades for students' work. Seventeen percent were monitoring completion but providing no feedback on students' work. Responses differed by grade level; roughly 20 percent of elementary teachers indicated that they monitored but provided no feedback compared with 14 percent of secondary teachers. Although only 19 percent of elementary teachers reported assigning letter grades, 50 percent of secondary teachers reported doing so. These differences could reflect preclosure differences in feedback and grading processes at the elementary and secondary levels.

Despite the widespread provision of distance learning materials to students, only 12 percent of teachers reported covering all or nearly all of the curriculum that they would have covered had their buildings remained open. Fourteen percent of city and suburban teachers reported covering all or nearly

all of the curriculum, which was twice the percentage of teachers in town and rural schools who reported doing so.

When asked about the extent to which assignments introduced new content versus reviewing previous content, we found that teachers in high-poverty schools (those in which at least 75 percent of students qualified for free or reduced-price lunch) were more likely to devote most of their curriculum to review relative to counterparts in low-poverty schools and schools with a majority of white students (Table 1). Consistent with the geographic differences described above, teachers in town and rural schools reported providing "all or almost all review" at higher rates than their city and suburban counterparts. We cannot determine the reasons for these differences, but they raise concerns about the extent to which students have had opportunities to make grade-level progress during school closures and suggest that students' readiness for the next grade level will vary based on where they attended school.

These findings do not tell us about the quality of instruction or the degree of students' engagement. Nonetheless, they provide important insights into what learning opportunities teachers offered and how they monitored learning, and they point to potentially significant disparities that districts will need to confront as students return in fall 2020.

## Principals Described Numerous Challenges and Needs for Additional Supports

Schools across the country faced a wide variety of potential challenges to providing distance learning to students, including financial, technological, and policy-related factors. Our principal survey included a set of questions about these challenges and about the resources or supports principals needed from their districts.

Figure 1 displays the extent to which principals viewed each of several factors as limiting their school's ability to transition to distance learning. Students' lack of internet access and concerns about equity were the most commonly noted limiting factors. Factors related to schools' ability to mobilize teachers and deploy online curricula were reportedly not as problematic. These included policies related to collective bargaining and use of online tools, along with teachers' internet and technology access.
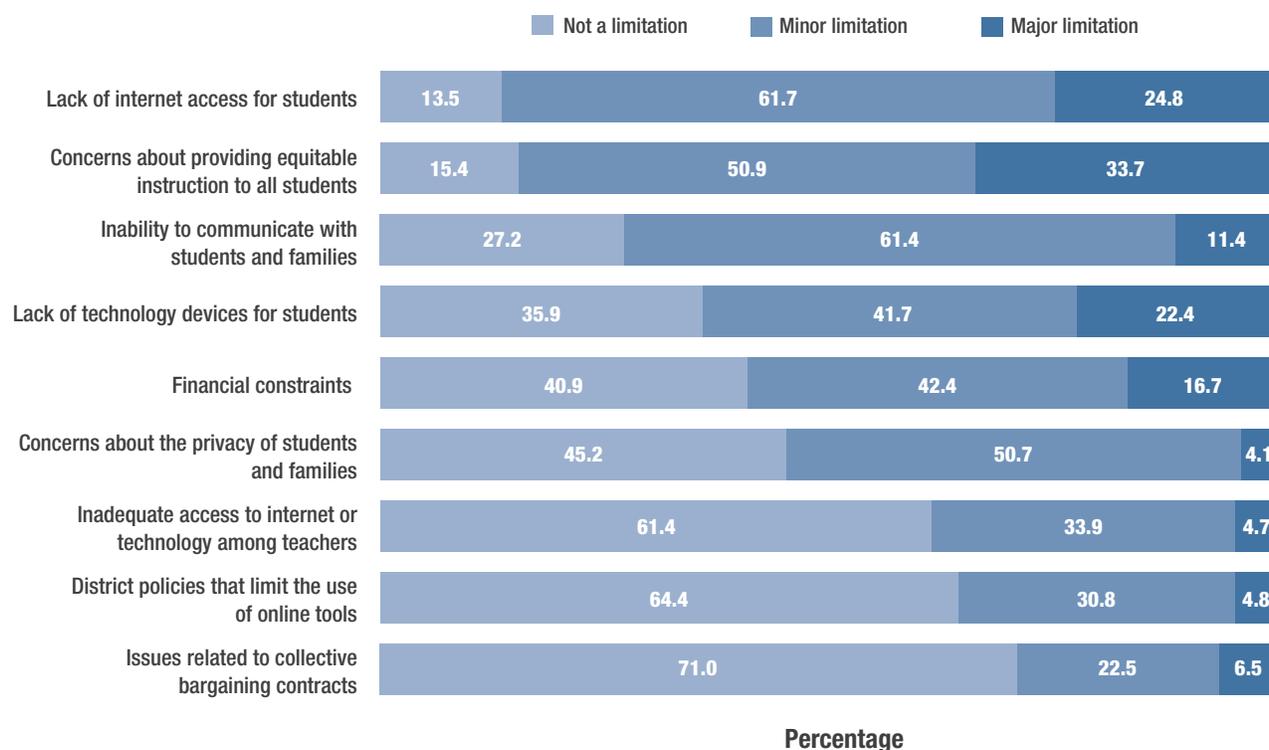
TABLE 1

## Percentages of Teachers Indicating a Focus on Mostly New Content

| | All or Almost All Review | Mostly Review, with a Smaller Amount of New Content | About Evenly Split Between Review and New Content | Mostly New Content, with a Smaller Amount of Review | All or Almost All New Content |
|---|---|---|---|---|---|
| Overall | 20.8 | 25.4 | 22.7 | 22.5 | 8.6 |
| Elementary (grades K–5) | 23.3 | 30.7 | 26.0 | 16.3 | 3.7 |
| Secondary (grades 6–12) | 18.5 | 20.5 | 19.7 | 28.2 | 13.1 |
| City | 18.3 | 27.5 | 26.1 | 19.3 | 8.7 |
| Suburban | 15.5 | 23.4 | 23.0 | 26.9 | 11.3 |
| Town and rural | 29.6 | 24.3 | 20.0 | 20.6 | 5.5 |
| High poverty | 26.3 | 28.2 | 22.8 | 17.2 | 5.4 |
| Low poverty | 18.8 | 23.8 | 23.1 | 24.6 | 9.8 |
| Majority students of color | 22.1 | 25.4 | 25.4 | 18.9 | 8.2 |
| Majority white students | 19.2 | 24.3 | 20.8 | 26.5 | 9.3 |

NOTE: The results in this table are based on the following survey question: "While you are providing distance learning, to what extent are you focusing on reviewing content that was taught before COVID-19 versus presenting new content?" The results in some rows do not sum to 100 percent because of rounding.

FIGURE 1

# Percentage of Principals Indicating That These Conditions Limited the Provision of Distance Learning

| | Not a limitation | Minor limitation | Major limitation |
|---|---|---|---|
| Lack of internet access for students | 13.5 | 61.7 | 24.8 |
| Concerns about providing equitable instruction to all students | 15.4 | 50.9 | 33.7 |
| Inability to communicate with students and families | 27.2 | 61.4 | 11.4 |
| Lack of technology devices for students | 35.9 | 41.7 | 22.4 |
| Financial constraints | 40.9 | 42.4 | 16.7 |
| Concerns about the privacy of students and families | 45.2 | 50.7 | 4.1 |
| Inadequate access to internet or technology among teachers | 61.4 | 33.9 | 4.7 |
| District policies that limit the use of online tools | 64.4 | 30.8 | 4.8 |
| Issues related to collective bargaining contracts | 71.0 | 22.5 | 6.5 |

**Percentage**

NOTE: This figure is based on responses to the following survey question: "Please indicate the extent to which each factor has limited the amount or type of distance learning materials you've been able to provide to students while your school building has been closed."

School subgroup differences were large on many of these items, and the differences were generally consistent with what we have learned from other data-collection efforts (e.g., Center on Reinventing Public Education, undated-b). For example, principals in high-poverty schools were more likely to indicate that lack of student internet access, lack of devices for students, inability to reach all families, and financial constraints were limiting factors for the amount or type of distance learning they were able to offer. In only one subgroup—teachers working in schools in rural areas or towns—did a majority of respondents indicate that lack of teachers' access to internet and technology was a limiting factor.

We also asked principals to indicate the extent to which they needed additional supports from their districts (see Table 2). The highest percentage of

principals reported a need for "strategies or resources to address the loss of students' opportunities to engage in hands-on learning (e.g., loss of internships, labs, or hands-on learning activities in the classroom)." Technology for students, training for teachers, and high-quality materials to support academic instruction and social and emotional learning were also areas of relatively high need.

The subgroup averages reported in Table 2 point to extensive disparities in the level of perceived need for additional resources. Although responses did not generally differ by grade level, we observed clear patterns in differences by school urbanicity, poverty level, and student racial/ethnic composition. For instance, nearly twice as many principals in high-poverty schools reported a major or very major need for technology for students and for teachers [the

TABLE 2

# Percentages of Principals Indicating a Major or Very Major Need for Additional Support from District, by School Subgroup

| | Elementary (Grades K–5) | Secondary (Grades 6–12) | City | Suburban | Town and Rural | High Poverty | Low Poverty | Majority Students of Color | Majority White Students |
|---|---|---|---|---|---|---|---|---|---|
| Internet, devices, or other technology for students to access online learning materials | 28.4 | 18.0 | 20.8 | 16.1 | 32.0 | 38.0 | 19.4 | 27.9 | 20.7 |
| Internet, devices, or other technology for teachers to provide online instruction | 10.7 | 9.9 | 11.9 | 6.3 | 12.6 | 16.6 | 8.3 | 13.2 | 7.9 |
| Lifting of requirements regarding student attendance or instructional time | 14.0 | 13.0 | 18.3 | 9.0 | 13.7 | 21.8 | 10.9 | 18.0 | 9.9 |
| Lifting of restrictions around the provision of distance learning supports (e.g., restrictions on online teacher-student interactions because of privacy or other concerns) | 9.4 | 8.4 | 10.0 | 8.2 | 8.7 | 11.6 | 8.2 | 10.4 | 7.8 |
| High-quality materials to support academic instruction while buildings are closed | 20.5 | 19.3 | 27.7 | 15.6 | 18.1 | 28.5 | 17.1 | 22.8 | 17.5 |
| High-quality materials to support social and emotional learning while buildings are closed | 23.2 | 24.8 | 31.4 | 19.5 | 23.2 | 29.0 | 22.9 | 27.6 | 21.7 |
| Tools and resources to enable engagement of students with counselors or school psychologists | 18.9 | 18.1 | 22.5 | 15.6 | 18.9 | 27.1 | 16.2 | 21.7 | 16.6 |
| Training to support teachers to deliver distance learning | 29.8 | 29.2 | 31.8 | 26.8 | 29.7 | 34.9 | 27.7 | 30.5 | 28.6 |
| Opportunities to network and learn from other principals | 13.8 | 12.5 | 14.0 | 13.1 | 13.2 | 20.8 | 11.1 | 15.5 | 11.8 |
| Strategies or resources to address the loss of students' opportunities to engage in hands-on learning (e.g., loss of internships, labs, or hands-on learning activities in the classroom) | 34.4 | 31.6 | 36.6 | 31.8 | 31.8 | 44.7 | 29.4 | 35.5 | 31.4 |

NOTE: This table is based on the following survey question: "Please indicate your current level of need for additional support from district leaders in each of the following areas." Response options were "no need," "very minor need," "minor need," "moderate need," "major need," and "very major need."

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percentages in that row double] compared with those in low-poverty schools, and we observed a similar pattern for "lifting of requirements regarding student attendance or instructional time."

The responses suggest that students' social and emotional well-being is of particular concern to leaders of city schools and high-poverty schools. Principals in city schools were more likely than their counterparts to express a major or very major need for "high-quality materials to support social and emotional learning while buildings are closed," and those in high-poverty schools indicated needing "tools and resources to enable engagement of students with counselors or school psychologists" at a higher rate than other principals. These findings show that school leaders across the United States faced numerous hurdles in their efforts to enact distance learning, and they reported needing several resources or supports from their districts. These challenges and needs were not distributed equitably across schools, which provides further evidence that students experienced disparities in access to necessary supports for learning.

## Most Teachers and Principals Stayed in Touch with Families, but Teacher Responses Reveal Disparities by Grade, Poverty, and Racial/Ethnic Composition

Teachers' ability to monitor their students' work depends in large part on whether they have the technology and information needed to stay in touch with students and their families, a topic we examined on both the principal and teacher surveys. Majorities of both teachers (59 percent) and principals (77 percent) reported being able to contact all or nearly all of their students and families while school buildings were closed. However, Figure 2 shows that teachers in secondary schools, high-poverty schools, and schools serving more than 50 percent students of color were less able than their peers to reach all or most of their students. The largest gap was between elementary and secondary teachers, with about 71 and 48 percent, respectively, reporting that they were able to reach nearly all or all of their students. Sixty-two percent of teachers in low-poverty schools were able to reach nearly all or all of their students,

FIGURE 2

## Percentage of Teachers Reporting That They Were Able to Contact All or Almost All of Their Students and/or Families
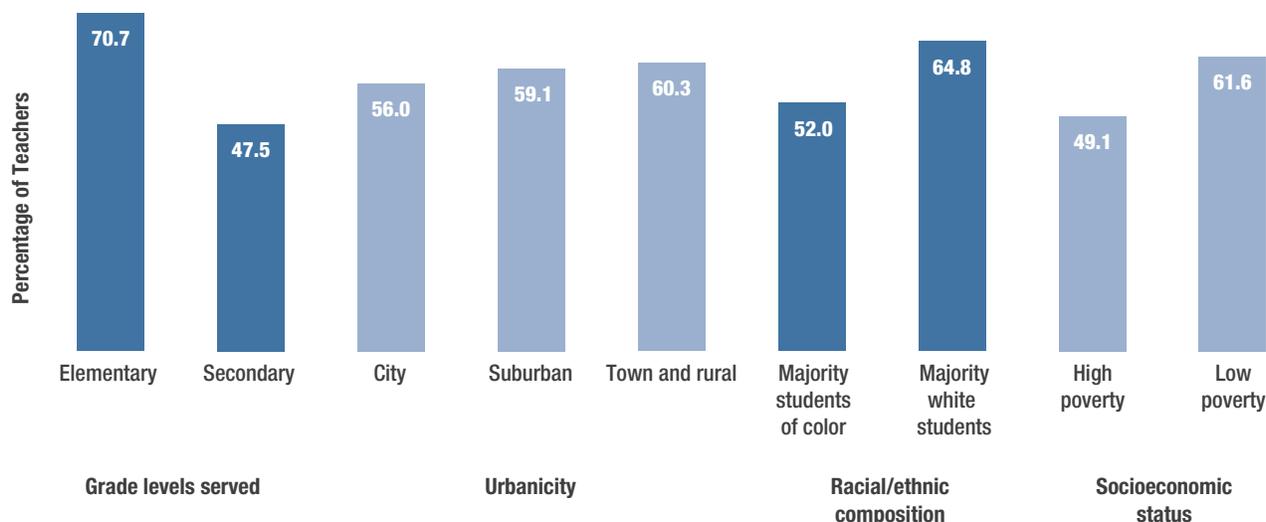


NOTE: This figure is based on the following survey question: "Approximately what percentage of your students and/or their families have you been able to contact since your school building closed?" Response options were "N/A—I haven't tried to contact students or families," "None or almost none," "Approximately 25 percent," "Approximately 50 percent," "Approximately 75 percent," "Nearly all or all," and "I don't know."

but only 49 percent of teachers in high-poverty schools could do so. Similarly, 65 percent of teachers in majority white schools reported being able to contact all or nearly all students and families compared with 52 percent of teachers in schools with majority students of color. As with the findings presented earlier, these results raise concerns about students' and families' access to instructional resources.

We asked teachers and principals to indicate the types of information their schools had shared with families. Across all school subgroups, at least 94 percent of principals and between 80 and 95 percent of teachers reported sharing information about how to help children with academic instruction, access such noninstructional services as meals or health services, support students' social and emotional needs, and promote students' physical activity. About 69 percent of teachers and 83 percent of principals reported providing guidance on how to talk with children about COVID-19. That last set of numbers, although high, is somewhat concerning given the extent of misinformation about the virus (Kavanagh, 2020). School staff have an opportunity to help students identify trustworthy sources of information, reducing the likelihood that students engage in actions that threaten their own emotional and physical health and the emotional and physical health of those with whom they interact.

## Majorities of Teachers Indicated Receiving Some Supports to Meet Diverse Learning Needs, but Only Half of Teachers of Homeless Students or Those with Severe Disabilities Reported Receiving Adequate Guidance to Meet the Needs of Those Students

We asked teachers and principals several questions to better understand the training and supports that teachers received for the distance learning instruction they were expected to provide. These questions included whether teachers received adequate guidance to address the learning needs of various student groups (e.g., students with disabilities, English language learners), what distance learning training teachers had received, and what additional support teachers needed from their districts or schools.

By late April and early May 2020, when this survey was fielded, between one-quarter and one-half of teachers—depending on the student subgroup we asked about—reported that they had *not* received adequate guidance or feedback to support the students they served in that subgroup. For example, of the 42 percent of teachers who reported that they support at least some students with severe disabilities, more than half indicated not getting adequate support for those students. Of the 71 percent of teachers who reported that they serve at least some homeless students, about 48 percent indicated not getting adequate guidance to support those students. A somewhat lower percentage of teachers (30 percent) reported not getting adequate guidance to support students with mild or moderate disabilities. These data demonstrate that a substantial portion of teachers did not receive the guidance they needed to help all the students they served.

As noted in the text box below, we observed some disparities in responses to these questions, particularly with regard to adequate supports for students with disabilities.

**Have you received adequate guidance and support to address the learning needs of students with mild or moderate disabilities?**

- Overall, 30 percent of teachers reported that they did not.
- Thirty-five percent of teachers in city schools reported that they did not, versus 24 percent of teachers in schools in towns or rural areas.
- Thirty-four percent of teachers in schools with 50 percent or more students of color reported that they did not, versus 26 percent of teachers in majority white schools.

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## Most Teachers Reported Having Received at Least Some Training on Remote Instruction Before the Pandemic, and Many Reported Participating in New Professional Learning Communities to Support Distance Learning

We asked teachers about eight types of professional learning opportunities for distance learning that they might have received, from training on distance learning opportunities that promote students' academic learning to providing engaging and motivating distance learning opportunities. About 27 percent of teachers indicated that they had not received training in any of the areas about which we asked.

A majority of teachers—62 percent—indicated that they had received at least some training on how to use virtual learning management platforms and technology. However, low percentages of teachers indicated receiving training on the other distance learning topics we asked about in our survey. For example, fewer than 30 percent of teachers indicated receiving any training over the past year with regard to ensuring that distance learning activities are accessible to all students, differentiating distance learning to meet individual student needs, engaging families in at-home learning, or providing distance learning opportunities that support students' social and emotional well-being.

Elementary teachers were less likely to report having received training on various distance learning topics than secondary teachers, including such topics as

- how to provide distance learning that promotes students' academic learning (34 percent of elementary teachers versus 49 percent of secondary teachers)
- how to use virtual learning platforms and technology (56 percent of elementary teachers versus 68 percent of secondary teachers)
- how to provide distance learning opportunities that are engaging and motivating (30 percent of elementary teachers versus 38 percent of secondary teachers).

On the other hand, higher percentages of elementary teachers (29 percent) reported having received training on how to engage families in home learning, compared with just 19 percent of secondary teachers. Teachers in city schools were significantly more likely to report receiving training on a variety of distance learning topics compared with their peers in the suburbs and rural areas, including how to provide distance learning opportunities that promote students' academic learning and support students' social and emotional well-being and how to help families access noninstructional supports (e.g., meals, social workers).

Although most teachers may not have had training on distance learning before schools closed in March, 57 percent of teachers we surveyed indicated that they have participated in new professional learning communities (PLCs) since schools closed. Nearly all of these PLCs were focused on helping teachers use new technology and access online resources. Some teachers reported searching out PLCs on their own, while others noted participating in PLCs through their districts or external sources. Some representative responses from teachers about the focus of their PLCs include the following:

> I am a member of [the] "Online Closure Educator Support," "Global Educator Collective," "Teaching During Covid-19," and "Online Closure Educator Support for Maths" Facebook groups.

> My district developed PLCs for the entire second grade to meet and discuss the areas we feel still need to be developed, as well as a general check-in to gauge and assess student work. We also formed a second grade PLC where we planned and created quality summative assessments to be used by the entire grade that were accessible to students [with 504 plans, individualized education plans, in dual-language immersion programs, in English learner programs, etc.]

> Webinars [were] provided on [social and emotional learning] and trauma-informed care during this time. One was provided by a coworker who's been doing research on this, another by a community coalition.

## Greatest Needs Among Teachers Included Strategies to Keep Students Engaged, Address Hands-On Learning Opportunities, and Support Students' Social and Emotional Learning

We asked teachers to indicate their degree of need for additional supports from their schools or districts.

By far, teachers were most likely to indicate "strategies to keep students engaged and motivated to learn remotely" as a very major or major need (see Figure 3). Other areas most commonly noted as major needs by teachers included strategies to address the loss of hands-on learning opportunities (29 percent of teachers), guidance or tools for assessing students' social and emotional well-being (23 percent), tools and resources to enable counselors or school psychologists to support students (22 percent),

FIGURE 3

## Percentages of Teachers Indicating Current Level of Need for Support from Their District or School in Each of the Following Areas
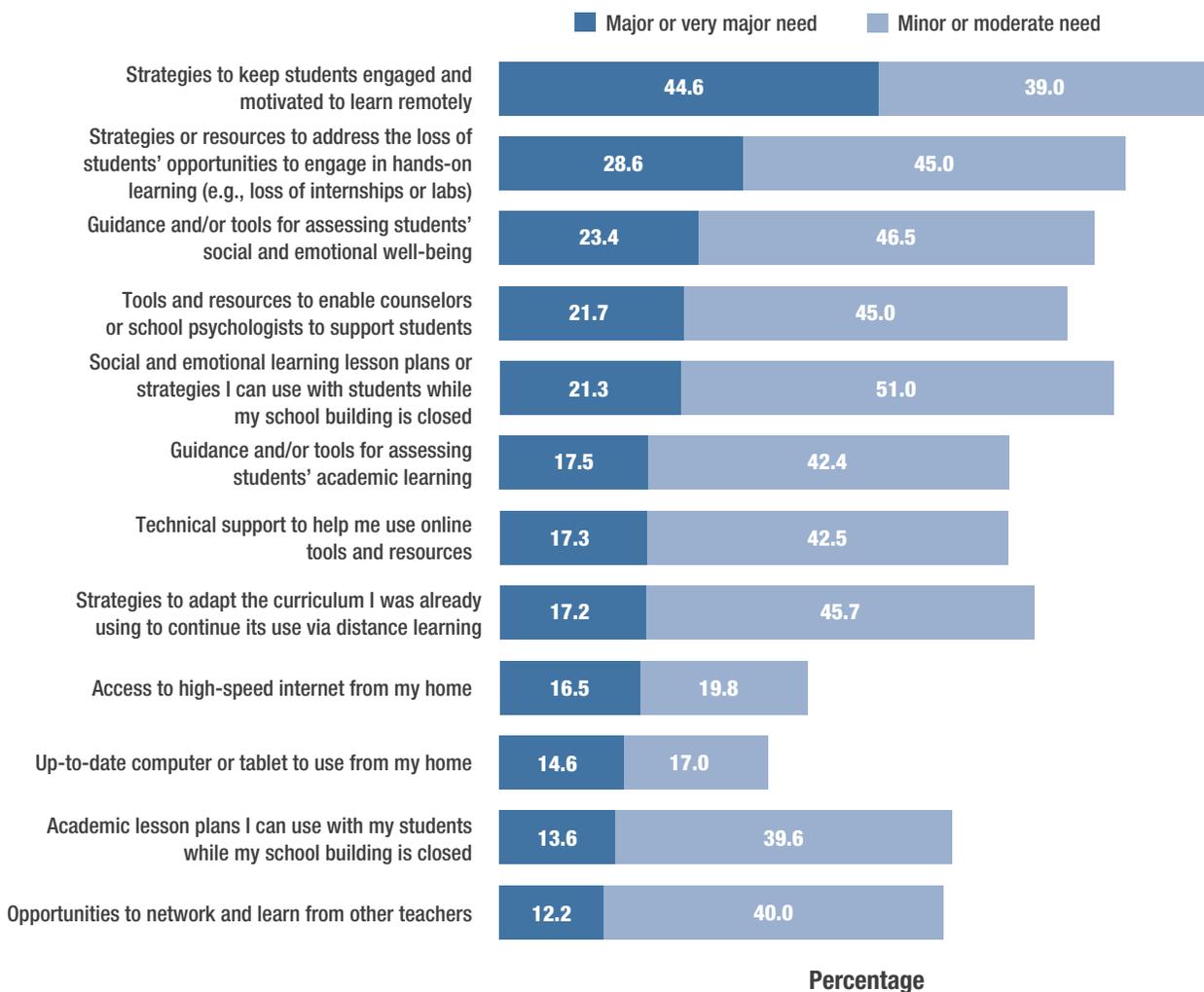


NOTE: This figure is based on the following survey question: "Please indicate your current level of need for additional support from school or district leaders in each of the following areas." Response options were "No need," "Very minor need," "Minor need," "Moderate need," "Major need," and "Very major need."

and social and emotional learning lesson plans or strategies (21 percent). Teachers were least likely to indicate that they needed access to high-speed internet or an up-to-date computer or tablet, but it bears noting that about 15 percent of teachers still stated these as major needs. This suggests that at least some teachers do not have the tools they need to support students who are learning online. These results are consistent with long-standing inequities; we do not know the extent to which the pandemic might have reduced or exacerbated these inequities.

We did not find large differences in needs among teachers in different subgroups. That said, significantly higher percentages of teachers from high-poverty schools—compared with their counterparts in low-poverty schools—noted a major or very major need for guidance for assessing students' social and emotional well-being (29 percent) and opportunities to network and learn from other teachers (17 percent). In addition, compared with secondary teachers, elementary teachers were more likely to note a major or very major need for

- social and emotional learning lesson plans they can use with their students (25 percent)
- strategies to adapt the curriculum they were already using (21 percent)
- technical support to help them use online resources (21 percent)
- guidance or tools to assess students' academic learning (21 percent)
- academic lesson plans they can use with their students (16 percent).

Furthermore, higher percentages of teachers in schools serving a majority of students of color expressed a need for up-to-date computers or tablets for themselves (18 percent) compared with teachers in majority white schools (11 percent).

Teachers educating the most vulnerable students often reported greater needs for support. In particular, roughly half of teachers serving students with severe disabilities and homeless students indicated that they did not have adequate support to meet the learning needs of those groups, and 28 percent of teachers indicated that they had not received any training in our distance learning topics. States and

school districts might want to emphasize professional development opportunities for teachers serving student populations who are particularly disadvantaged during this time and consider how to serve them better. Districts could provide professional training that speaks directly to major needs that large percentages of teachers expressed, as seen in Figure 3 (e.g., strategies to keep students motivated, ways to support students' hands-on learning, methods to assess students' social and emotional well-being).

## Principals Anticipate That They Will Prioritize Emergency Preparation, Academic Disparities, and Students' Social and Emotional Health When Schools Reopen
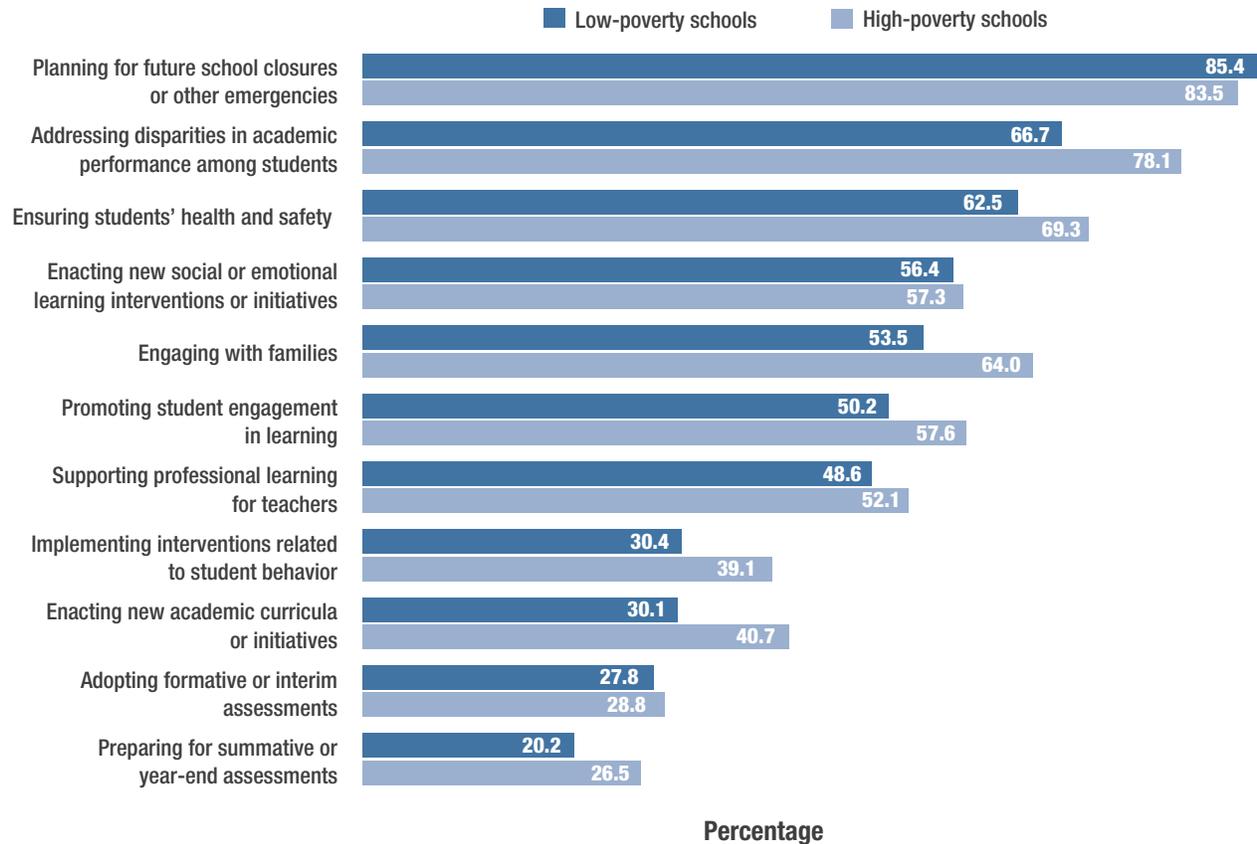
We asked principals whether they anticipated putting more or less emphasis on certain goals after schools reopened relative to those goals' prioritization before schools closed. The goals that we asked about in our survey included professional learning supports for teachers and engaging with families. We also asked principals about what steps they might take during the summer and next school year to deal with pandemic-related disruptions. For secondary principals, we asked about their expectations of the percentage of their graduating seniors who would apply to and enroll in college.

"Planning for future school closures or other emergencies" topped the list of goals that principals indicated would be a higher priority when schools reopened (relative to its priority before schools closed). Majorities of principals also stated that they would place a higher priority on numerous other goals, including addressing disparities in students' academic performance, ensuring students' health and safety, engaging with families, enacting new social or emotional learning interventions, and promoting student engagement in learning.

As shown in Figure 4, higher percentages of principals in high-poverty schools anticipated placing a high priority on many of these goals upon reopening compared with their peers in low-poverty schools.

FIGURE 4

# Percentage of Principals in High- and Low-Poverty Schools Noting Each Area as a Higher Priority When Their School Building Reopens Relative to its Priority Before Schools Closed

Legend: ■ Low-poverty schools   ■ High-poverty schools

| Area | Low-poverty schools | High-poverty schools |
|---|---|---|
| Planning for future school closures or other emergencies | 85.4 | 83.5 |
| Addressing disparities in academic performance among students | 66.7 | 78.1 |
| Ensuring students' health and safety | 62.5 | 69.3 |
| Enacting new social or emotional learning interventions or initiatives | 56.4 | 57.3 |
| Engaging with families | 53.5 | 64.0 |
| Promoting student engagement in learning | 50.2 | 57.6 |
| Supporting professional learning for teachers | 48.6 | 52.1 |
| Implementing interventions related to student behavior | 30.4 | 39.1 |
| Enacting new academic curricula or initiatives | 30.1 | 40.7 |
| Adopting formative or interim assessments | 27.8 | 28.8 |
| Preparing for summative or year-end assessments | 20.2 | 26.5 |

**Percentage**

NOTE: This figure is based on the following survey question: "Please indicate whether you expect each of the following goals to become a higher or lower priority for you when your school building reopens relative to what it was before your school building closed." Response options were "Much lower priority," "Somewhat lower priority," "Same level of priority," "Somewhat higher priority," and "Much higher priority." Bars show combined percentages for "Somewhat higher priority" and "Much higher priority."

We also observed similar, but slightly smaller, differences between principals in schools with more students of color compared with principals in schools with majority white students. Goals that principals in high-poverty schools and schools serving more students of color were significantly more likely to prioritize compared with their counterparts in lower-poverty and majority white schools include the following:

- enacting new academic curricula or initiatives
- implementing interventions related to student behavior
- addressing disparities in academic performance
- engaging with families.

Teachers also were asked how they would prioritize their goals when schools reopened relative to their priorities before schools closed. Teachers' responses were relatively similar to those of principals, with similar differences in responses between teachers in high- and low-poverty schools and in schools with more versus fewer students of color. For example, 46 percent of teachers in high-poverty schools and 42 percent of teachers in schools with majority students of color indicated that they anticipated placing a higher priority on assessing students' academic achievement, compared with 37 percent and 36 percent of those in lower-poverty and majority white schools, respectively. Principals and

**How do you expect the percentage of your seniors enrolling in college to change as a result of COVID-19–related changes to school programs and practices?**

Percentage of principals expecting a decrease, by school type:

- City high schools: 49 percent
- Rural or town high schools: 29 percent
- High-poverty schools: 48 percent
- Low-poverty schools: 37 percent
- Schools with majority students of color: 46 percent
- Schools with majority white students: 34 percent.

NOTE: The difference between principals from city and rural or town high schools was significant ($p < 0.05$), although the other differences were not. We highlighted nonsignificant differences, given that they were notable; the smaller sample size of high school principals for this survey item likely reduced our ability to identify significant differences.

teachers from higher-poverty schools and schools with more students of color might place a high priority on these goals, regardless of school closures. Nonetheless, these differences highlight the likely greater needs of principals and teachers serving students of color and students in high-poverty settings.

We also asked principals whether they anticipate their school or district taking steps to deal with pandemic-related disruptions, from summer classes to changing grading requirements. At least 40 percent of principals anticipated that their school or district would take the following steps:

- providing tutoring during the 2020–2021 school year (58 percent of principals)
- changing grading or credit requirements for students to be promoted to the next grade level (48 percent of principals)
- modifying the 2020–2021 school day curriculum to help students catch up (47 percent of principals)
- providing supplemental online courses during the 2020–2021 school year to help students catch up (45 percent of principals)

- partnering with out-of-school organizations to provide resources to families and students (43 percent of principals)
- providing a stand-alone summer program (42 percent of principals).

It is worth noting that when principals anticipated any of these steps, they mostly anticipated taking these steps for some, but not all, students. The only exceptions to this rule were steps they anticipated for changing grading or credit requirements or modifying the school day; 27 percent of principals indicated that they were anticipating that these steps would apply to all students.

Finally, principals whose schools included 12th grade also were asked about expected changes in the number of their students applying to and enrolling in college in the fall. Generally, fewer than 5 percent of principals indicated that they expected an increase in college applications or enrollment; about 30 percent indicated that they expected a decrease in college applications, with 38 percent expecting a decrease in college enrollment.

These data suggest that district priorities have shifted because of school closures, with principals expecting a stronger emphasis on emergency preparation, academic disparities, and social and emotional learning. Principals in high-poverty schools—and those in schools serving more students of color—were significantly more likely than those in low-poverty schools and majority white schools to anticipate placing a higher priority on providing new academic and behavior initiatives, addressing academic disparities, and engaging with families.

Because many principals indicated that post-opening support strategies would be aimed at some, but not all, students, state, district, and school personnel should be thoughtful about how they place students in tutoring, summer school, supplemental courses, or other supports. Vulnerable students could be overlooked when these much-needed supports are put into place, while, without proper screening, some students might receive support that is redundant or unnecessary.

Finally, the data on expected decreases in college application and enrollment, especially from

principals in high-poverty schools and in schools with more students of color, are alarming and might be a bellwether for record declines in college attendance over the coming school year. For this reason, postsecondary institutions—as well as states and districts—should consider ways to reduce burdens and barriers to college application and enrollment and create innovative strategies to reduce these declines, so that students who aspire to a college education have that opportunity.

## Discussion

This Data Note presents a sample of findings from the spring 2020 COVID-19 AEP surveys. By synthesizing the perspectives of teachers and principals who work in diverse settings throughout the United States and creating nationally representative as well as subgroup-specific summaries, we provide a wide-ranging picture of teaching, leading, and learning during an unprecedented time. The results suggest some implications for educators, policymakers, and support providers as they look ahead to the 2020–2021 school year.

- Educators reported widespread efforts to support students through distance learning and to connect with students and families. Our results corroborate other data sources that show that as school buildings closed their doors, educators across the country pivoted rapidly to address their students' academic, social, and emotional needs.
- Teachers and principals both indicated that teachers had received some training to equip them for this work, although they also identified gaps in that training. These gaps are understandable, given the lack of lead time for districts and education support providers. The findings highlight some areas that should be addressed in preparation for next year, including helping teachers meet the needs of their most vulnerable students.
- The return to school is always marked by gaps in student skills and knowledge that teachers need to help close, but the incomplete

curriculum coverage described by respondents makes it likely that this need will be even greater this fall. Kuhfeld et al., 2020 predicted significant learning loss, caused in part by the ineffectiveness of online instruction relative to in-person instruction; curriculum coverage might be another factor contributing to that effect. Moreover, because some form of remote learning probably will still be in place, teachers might face continued difficulty covering new content despite feeling heightened pressure to do so. Together, these conditions make it clear that educators will face significant challenges when school begins again. The nature of these challenges will vary; for instance, a majority of principals in rural schools reported that teachers had inadequate technology access, while teachers in schools with a majority of students of color expressed significantly more need for up-to-date computers and tablets for students compared with teachers in majority white schools.

- These challenges will be especially acute in schools that serve students who lacked access to high-quality instruction while buildings were closed. Our findings reveal large disparities in students' access to supports for learning—disparities that predated the pandemic and that educators will need to continue to tackle. Federal agencies, private funders, and others have begun dealing with some areas of inequity, such as internet and device access, but any opportunity gaps that result from spring 2020 events likely will require extra supports for students who have traditionally been underserved by the education system.
- Respondents expressed a need for ways to motivate and engage students and to address the loss of hands-on learning opportunities. These findings might reflect the inherent limitations of the current distance learning technology that was available to most schools; they suggest that whatever model schools

adopt in the 2020–2021 school year, finding ways to promote engagement will be crucial.

- The inability of principals and teachers to reach all of their students and students' families raises additional concerns about inequities in students' access to instruction. The fact that fewer than half of teachers of students in grades 6 through 12 could reach all their students is especially worrisome, because it can be difficult to make up for lost instructional time in the middle and high school grades. School and district emergency plans should include efforts to obtain contact information for all students and families.

- Finally, school principals—whose jobs have always involved a need to balance numerous goals and tasks—have reported that several goals will be more important this fall. Principals will be simultaneously planning for emergencies, working with teachers to address learning gaps, and developing approaches to deal with students' mental health needs. They also will be determining which students should get additional support through tutoring, taking additional courses, or other strategies. District leaders will need to help principals navigate an already formidable set of responsibilities and provide clear, data-based guidance for students' placement into supports and courses.

These results provide some guidance for educators and others as they consider how to create the best possible teaching and learning environments this school year. At the same time, surveys can provide only a surface-level picture of what is happening on the ground in schools. Users of these data should consult the many other data sources that provide the perspectives of such groups as parents, students, and district leaders, including more-nuanced qualitative data where available. Much of this work is available via the Center on Reinventing Public Education's Evidence Project (Center on Reinventing Public Education, undated-c). Future reports from our project will incorporate additional data to explore some topics in greater detail.

## How We Conducted These Analyses

In this report, we provide weighted teacher and school leader responses overall and, in selected cases, for specific subgroups (e.g., teachers or school leaders from schools in city, suburban, and town or rural settings) when differences were substantive and/or significant. To assess whether differences between subgroups were statistically significant, we performed Wald tests to compare the weighted means of each subgroup separately for each item. We examined whether the weighted means of each subgroup were statistically different at the $p < 0.05$ level; any differences highlighted in this report were significant unless otherwise noted. Because the intent of this report is to provide descriptive information rather than to test specific hypotheses, no adjustments were made for multiple comparisons. The subgroups that we examined for these analyses are summarized in Table 3.

TABLE 3

## Subgroups Used for Analysis

| Grade Levels Served[a] | | Urbanicity | | | Racial/Ethnic Composition | | Socioeconomic Status | |
|---|---|---|---|---|---|---|---|---|
| Elementary (grades K–5) | Secondary (grades 6–12) | City | Suburban | Town and rural | Majority students of color (more than 50% nonwhite students) | Majority white (fewer than 50% nonwhite students) | High poverty (75% or more students are eligible for free or reduced-price lunch) | Low poverty (fewer than 75% of students are eligible for free or reduced-price lunch) |

NOTE: Data on school and student demographics were obtained by linking survey data files to the 2018–2019 Common Core of Data (CCD), a series of public-use data files issued by the National Center for Education Statistics containing basic information on all public elementary and secondary schools in the United States. Schools in which 50 percent or more of the student population identified as students of color were assigned to the majority students of color category, while the remaining schools were assigned to the majority white category. Schools in which 75 percent or more of the student population were eligible to receive free or reduced-price lunch were assigned to the high-poverty category, while the remaining schools were assigned to the low-poverty category. Although 2018–2019 CCD data were used to assign teachers and principals to the subgroups described above, 2016–2017 CCD data were used to weight the survey data files.

[a] We relied on self-reported survey data from teachers and principals to categorize school levels. Teachers of grades K–5 and principals serving in schools with grades K–5 were placed in the elementary group, whereas those serving grades 6–12 were placed in the secondary group. Teachers who reported teaching both elementary and secondary grades were assigned to the group for which they reported teaching more grades. Respondents who reported teaching an equal number of elementary and secondary grades were assigned to the secondary group. Principals who reported serving in schools with both elementary and secondary grades were assigned to the group that included the majority of grades that their school served. Principals of schools with an equal number of elementary and secondary grades were assigned to the secondary group.

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