Over the course of the coronavirus disease 2019 (COVID-19) pandemic, high rates of job-related stress and difficult working conditions have fueled fears of an impending national teacher shortage (Natanson, 2022). The limited data available on this topic have ignited considerable disagreement on how aggressively policies to attract and retain teachers should be deployed. Although teacher surveys suggest that many educators thought about leaving their jobs during the initial wave of the pandemic (Diliberti, Schwartz, and Grant, 2021; Steiner and

### KEY FINDINGS

- **At the time of survey administration in March and April 2022—just after the height of the COVID-19 omicron variant surge—more than half of responding K–12 public school principals across the country indicated that they regularly had insufficient teaching staff to cover their classrooms. Staffing issues were reportedly most prevalent at lower-income schools and schools serving mostly students of color.**

- **Principals overwhelmingly attributed staffing challenges to insufficient availability of substitute teachers. Comparatively few principals pointed to vacant teaching positions as the reason for classroom coverage issues.**

- **Most principals—both those with and without teaching vacancies in their schools—expressed that their hiring efforts had been impeded by low applicant counts, low compensation, and underqualified candidates. Principals at schools that predominantly serve White students were significantly less likely to indicate that these were barriers to hiring.**

- **Most principals with vacancies for classroom teachers reported that such vacancies had increased at their schools between the 2020–2021 and 2021–2022 school years, largely because of declines in applications and accepted job offers. Few principals attributed their increasing vacancies to an expansion in the number of teaching positions.**

- **When hiring, most principals prioritized how well applicants’ mindsets aligned with the vision and culture of their schools. Elementary principals prioritized teaching experience, while high school principals prioritized credentials. Principals varied widely on whether they prioritized the diversity of their educator workforces.**
Woo, 2021; Walker, 2022), a national survey of school district leaders in spring 2022 revealed that three-quarters of districts had increased teaching and non-teaching staff headcounts from pre-pandemic levels (Diliberti and Schwartz, 2022).

Ambiguity about what constitutes a teacher shortage further complicates this discussion (Aldeaman 2022; Bruno 2022). One of the most-common definitions of teacher shortage—an inability to attract and retain enough teachers to keep classrooms staffed—overlooks the possibility of day-to-day shortages caused by teacher absenteeism and substitute teacher availability. Another common interpretation—focusing on the growing prevalence of unfilled positions (i.e., vacancies)—can be problematic because vacancies can signal that districts have unmet needs or reflect an increase in teaching positions. One additional definition—focusing on growth of teacher headcounts at the district level rather than at the school level—has been used to dismiss the effect of the pandemic on school staffing struggles. This view overlooks the possibility that shortages worsened at many schools, even when aggregate teacher headcounts increased at the district level. Schools within the same district often access distinct teacher labor markets: They attract and compete for different teacher pools (Edwards et al., 2022; Kraft et al., 2020). These within-district differences led to staffing disparities even before the pandemic (Dee and Goldhaber, 2017), and it remains an open question whether the pandemic exacerbated these disparities. Finally, the most recent data from school district leaders (Diliberti and Schwartz, 2023) and state-level studies (Bacher-Hicks, Chi, and Orellana, 2022; Bastian and Fuller, 2023; Camp, Zamarro, and McGee, 2022) suggest that higher rates of teacher turnover rates might finally be manifesting as the pandemic begins to recede. Even if current staffing challenges do not constitute a teacher shortage, hiring conditions in the near future remain uncertain.

In this report, we highlight national principal perspectives, which convey a distinct and important side of the story about school staffing struggles during the pandemic. Principals are primarily responsible for staffing schools and ensuring that there is a qualified educator in every classroom. Many principals identify hiring needs, seek out candidates, and extend job offers. While district leaders provide high-level knowledge of aggregate staffing trends, principals can uniquely provide insight into how the pandemic has affected teacher absenteeism and day-to-day coverage in their schools. A focus on hiring trends at the district level could also overlook staffing inequities within districts—particularly at lower-income and rural schools (U.S. Government Accountability Office, 2022). Additionally, this report covers a national sample of principals, providing new insights to complement previous, state-specific data on school staffing during the pandemic (Aldeman, 2022; Goldhaber and Gratz, 2022; Goldhaber and Theobald, 2022; Kraft et al., 2020). Our findings help indicate which state-specific findings might be applicable (or prove to be inapplicable) from a national perspective.
Through the American Educator Panels, we administered a survey to a nationally representative sample of K–12 public school principals (N = 1,694). We asked principals about their experiences with covering classrooms and hiring staff during the 2021–2022 school year. The survey was administered in March and April 2022 following the height of the omicron variant surge, capturing principals’ viewpoints during a particularly vulnerable moment of the pandemic. Throughout this report, we also reference survey responses from district leaders. These responses were obtained through a separate survey administered to district leaders during the same approximate period (Diliberti and Schwartz, 2022).

Our findings confirm that, in the spring of the 2021–2022 school year, most principals struggled to keep classrooms consistently covered with teachers and many found that hiring had become more challenging since the previous school year. Principals indicated that a lack of substitute teachers—not an excess of teaching vacancies—was by far the main reason for classroom coverage shortages, despite district efforts to increase substitute pay (Diliberti and Schwartz, 2022). Principals highlighted the growing prevalence of quarantine, paid leave, and extended medical leave as major factors affecting the day-to-day availability of classroom teachers. These overlooked near-term shortages merit particular attention given the documented negative effects of teacher absenteeism on student achievement (Clotfelter, Ladd, and Vigdor, 2009; Miller, Murnane, and Willett, 2008) and other potential effects on school climate, teacher collaboration, and principal burnout.

In addition to day-to-day coverage issues, most principals—particularly those at lower-income schools and schools primarily serving students of color—reported that teacher vacancies were on the rise. Most of these principals believed that vacancies had grown more difficult to fill than in the prior school year, particularly because of declining applicant counts. Comparatively few principals believed that teacher vacancies had increased because of an expansion in positions. As a follow-up, we explored principals’ priorities for hiring...
teachers. Principals expressed strong preferences for like-minded teachers who share similar mindsets and values and that responses varied with respect to the importance of diversity in their teacher workforce and which specific aspects of a teacher’s credentials to prioritize. Overall, despite aggressive efforts by districts to increase teacher hiring, we found that many principals expressed growing concerns about the hiring climate for educators—an issue that could be exacerbated as federal relief funds expire (Diliberti and Schwartz, 2022).

**Many Principals Faced Challenges Covering Classrooms and Filling Vacancies**

**More Than Half of Principals Regularly Had Insufficient Teaching Staff to Cover Classrooms**

Researchers and policymakers have emphasized that the term *teacher shortage* should be carefully defined (Bruno, 2022). In this survey, we asked principals, “Would you say that your school is experiencing a shortage of teaching staff this school year (2021–2022)? A shortage of teaching staff means that you regularly do not have enough teaching staff to cover your classrooms.”

We found that these shortages—which we refer to as *staffing shortages*—were widespread in spring 2022; more than one-half of principals responded that they regularly did not have enough teaching staff to cover their classrooms. Principals reported that teachers were taking more time off during the 2021–2022 school year for a variety of reasons, such as paid leave, medical leave, and COVID-19 quarantine, and that schools lacked sufficient substitute teachers to cover their absences. Figure 1 provides a breakout of these reasons, led by 86 percent of principals attributing their staffing shortages to a lack of substitute teachers.

Just 35 percent of principals attributed their staffing issues to *vacancies*, which we define as unfilled positions. These responses suggest that principals were more frequently concerned with day-to-day disruptions in staffing than with short-

![FIGURE 1](image)

**Why Have Schools Been Facing Staffing Shortages?**

<table>
<thead>
<tr>
<th>Reason</th>
<th>Percentage of Principals</th>
</tr>
</thead>
<tbody>
<tr>
<td>We don't have enough substitute teachers</td>
<td>86%</td>
</tr>
<tr>
<td>More teachers are taking paid leave (e.g., sick, vacation, or personal days) than usual</td>
<td>50%</td>
</tr>
<tr>
<td>Teaching staff are quarantining due to exposure to COVID-19</td>
<td>43%</td>
</tr>
<tr>
<td>We have lots of vacant teaching positions</td>
<td>35%</td>
</tr>
<tr>
<td>More teachers are on extended medical leave than usual</td>
<td>34%</td>
</tr>
</tbody>
</table>

NOTE: This figure shows the percentage of principals indicating reasons why their classrooms regularly did not have enough teaching staff. Responses come from the survey question: “Why is your school experiencing a shortage of teaching staff this school year (2021–2022)?” (n = 885). Only principals who responded affirmatively to the question “Would you say that your school is experiencing a shortage of teaching staff this school year (2021–2022)?” were included. Respondents were instructed to select all that apply. 1.5 percent of principals responded “I don’t know” and 5.9 percent responded “Other.” Both of these groups of respondents were excluded from the figure.
ages caused by unfilled teaching positions. Although teacher shortages are often associated with a sudden inability to attract and retain classroom teachers, principal perspectives paint a different picture of the shortages that mattered to them. Still, Goldhaber and Theobald (2022) finds that teacher attrition tends to rise as unemployment falls, suggesting that attrition might yet pose a problem in the future should the economy continue to recover, particularly as pandemic aid begins to phase out (Diliberti and Schwartz, 2022).

We also calculated how reported shortages differed across schools by grades served, school size, locale, primary ethnicity of the student body, and whether schools primarily served lower-income students (i.e., students who qualified for FRPL). We found that staffing shortages were most prevalent at lower-income schools and schools predominantly serving students of color. This suggests that teacher staffing issues were unevenly distributed across localities, echoing pre-pandemic research on the teacher labor market (Dee and Goldhaber, 2017; Ingersoll, 2003).

**Most Principals Reported Staff Vacancies, with Greatest Needs for Substitute Teachers, Paraprofessionals, and Classroom Teachers**

Eighty-seven percent of principals reported having at least one staff vacancy at their schools. Figure 2 shows the percentage of principals who reported vacancies across ten different staffing categories. Overall, principals were more likely to report vacancies for teaching positions than for nonteaching positions. Substitute teachers were by far the most common need, followed by paraprofessionals and classroom teachers. We note that, in most districts, substitute teachers are assigned to schools from a centralized pool on request. Therefore, schools generally do not have vacant school-level positions for substitute teachers. We therefore define substitute vacancies as a general unmet need for substitute teachers. In terms of nonteaching positions, more than one-third of principals reported vacancies for custodians and cafeteria workers. The prevalence of vacancies

**FIGURE 2**  
Percentage of Principals Reporting Vacant Staff Positions in the 2021–2022 School Year

<table>
<thead>
<tr>
<th>Role</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Substitute teachers</td>
<td>76</td>
</tr>
<tr>
<td>Paraprofessionals</td>
<td>56</td>
</tr>
<tr>
<td>Classroom teachers</td>
<td>55</td>
</tr>
<tr>
<td>Custodians</td>
<td>44</td>
</tr>
<tr>
<td>Other</td>
<td>43</td>
</tr>
<tr>
<td>Cafeteria workers</td>
<td>39</td>
</tr>
<tr>
<td>Teaching assistants</td>
<td>35</td>
</tr>
<tr>
<td>Student teachers</td>
<td>16</td>
</tr>
<tr>
<td>Administrative staff</td>
<td>14</td>
</tr>
<tr>
<td>Administrators (e.g., assistant principals)</td>
<td>12</td>
</tr>
</tbody>
</table>

NOTE: This figure depicts response data from the survey question: “Do you have vacant teaching or staff positions at your school this school year (2021–2022) in any of the following roles?” (n = 1,694). Respondents were instructed to “select all that apply.”
for these positions broadly aligns with district leaders’ responses from the spring 2022 American School District Panel (Diliberti and Schwartz, 2022).

We caveat this finding by noting that the LTS did not ask principals to quantify how many vacancies they had; we therefore cannot distinguish between schools with few vacancies and schools with many. The January 2022 NCES School Pulse Panel provides some context to fill this gap (NCES, 2022). Among the schools in the Pulse Panel that reported teaching vacancies, roughly one-half reported that 5 percent or less of teaching positions were vacant, nearly one-third reported that between 5 percent and 10 percent of teaching positions were vacant, and the remainder reported that more than 10 percent of teaching positions were vacant. Taken together, these findings suggest that, although most schools had vacancies, they often did not have a large quantity of vacancies to fill.

Underscoring the varied nature of staffing challenges faced by principals in the 2021–2022 school year, a large proportion of principals, 43 percent, selected the “Other” response to this survey item. About two-thirds of those selecting “Other” said they had vacancies for noninstructional positions and positions outside of the school building (e.g., family engagement coordinators, office clerical staff, bus drivers). Roughly 10 percent of those selecting “Other” indicated that their schools had vacancies for counselors or school psychologists.

We also noted some significant differences across school characteristics. After controlling for other school characteristics, principals of urban and suburban schools were less likely to report vacancies for classroom teachers and substitutes relative to principals of rural schools. Elementary school principals were also less likely than middle and high school principals to report vacancies for many positions, including classroom teachers and all nonteaching positions. Principals at lower-income schools were more likely than other principals to report vacancies for classroom teachers but not for any other position.

**Principals Overall Believed a Lack of Qualified Applicants Was a Primary Obstacle to Filling Teaching Vacancies, but Barriers Varied by Subgroup**

Now focusing specifically on teaching vacancies, we found that principals reported a variety of barriers to hiring and that their hiring experiences varied across schools. As shown in Figure 3, principals with vacancies most frequently cited a lack of applicants (87 percent) as an impediment to hiring, and more than three-quarters of those principals indicated it was a major barrier to their ability to fill vacancies. Two-thirds of principals with teaching vacancies said the applicants that they did receive were not qualified. However, principals at schools that predominantly serve White students were less likely to experience these barriers to teacher hiring and more likely than principals of other schools to report that they experienced no major barriers at all. Schools serving primarily lower-income students and students of color have historically been more likely than other schools to employ underqualified teaching staff whose experience is not a match for their position (Garcia and Weiss, 2019; Ingersoll, 2002). The degree to which these obstacles have been exacerbated by pandemic-related pressures is unclear, although insights from school district leaders corroborate these patterns at the district level (Diliberti and Schwartz, 2023).

Principals at urban and suburban schools were less likely than principals at rural schools to report that low compensation was a barrier to hiring teachers, but they were more likely to say that the speed and timing of the hiring cycle and COVID-19 policies were barriers, suggesting that hiring solutions could vary by school location. Principals’ perceptions
of barriers also varied by school level. Elementary and middle school principals were more likely than those at high schools to cite low compensation as a barrier. Finally, principals at elementary schools had an easier time finding qualified teacher applicants than did principals at middle and high schools, which is consistent with historical patterns that suggest an oversupply of elementary-certified teachers (Sawchuk, 2013).

Most Principals Noted That Vacancies Became More Prevalent and Difficult to Fill Between the 2020–2021 and 2021–2022 School Years

The LTS asked principals with vacancies (87 percent of all principals) whether their vacancy counts had increased since the previous year and whether vacancies had become more difficult to fill. Figure 4 shows the percentage of principals who responded affirmatively to these questions across each of the ten staffing categories. Across all categories, most principals with vacancies indicated that vacancy counts had increased since the previous year, and that they were harder to fill in the 2021–2022 school year than in 2020–2021. Most notably, almost 90 percent of principals indicated that substitute teachers had become more difficult to find, despite district-level efforts to attract substitute teachers by increasing pay and benefits (Diliberti and Schwartz, 2022).

Figure 5 provides context as to why school leaders felt vacancies had increased. Most noted a decrease in applicants, and many stated that fewer people had accepted job offers for teaching positions. Roughly 30 percent to 40 percent of principals nationwide perceived an uptick in retirements and resignations, though teacher retention rates had reportedly increased in some states (Aldeman, 2022; Goldhaber and Theobald, 2022). These conflicting results could potentially be explained by differences...
in sample composition (e.g., national versus state-specific) and study timing. However, other studies have suggested that such voluntary departures might indeed be on the rise as the pandemic has begun to recede and educator morale remains low (Diliberti and Schwartz, 2023; Jotkoff, 2022).

Although surveys of district leaders suggest that rising vacancy rates might have been caused by an influx of federal pandemic aid that districts used to create new teaching positions (Diliberti and Schwartz, 2022), only 16 percent of principals who experienced a year-over-year increase in vacancies attributed this increase to an expansion of teaching positions. Principals reported that the rise in teaching vacancies was not driven by an expansion in available positions but by declining numbers of qualified applicants and accepted offers. Still, in spring 2022, many district leaders planned to continue expanding hiring beyond pre-pandemic levels (Diliberti and Schwartz, 2022).
When Hiring, Principals Most Valued Teachers’ Mindsets and Flexibly Hired Teachers with Different Preparation Backgrounds

Principals Prioritized Teachers’ Mindsets but Differed on the Importance of Diversity, Certifications, and Behavior Management Skills

We explored which qualifications principals felt were most important for prospective teachers to have. We presented principals with a list of 13 teacher qualifications and asked them to select the three that they valued most. Figure 6 presents a subgroup breakout of each qualification with at least a 5 percent selection rate and the proportion of principals who selected it as a top-three most valued qualification. The overall percentage is reported in parentheses next to each qualification, and subgroup-specific percentages are reported in the corresponding columns. The most common response by far was whether teachers’ mindsets aligned with the school’s vision and culture, followed by whether teachers’ certifications aligned with school needs at a distant second. Among other qualifications with at least a 5 percent selection rate, principals said they valued experience managing student behavior, collegiality (i.e., whether teachers got along with prospective colleagues and students), teacher preparation (e.g., undergraduate major and preparation programs), and educator diversity.3

After adjusting for school characteristics, we documented particularly large differences in hiring preferences by grades served: Elementary principals valued credentials (e.g., teacher certification subject and undergraduate major) far less and teaching experience far more than did middle and high school principals. A teacher’s ability to manage student behavior was a priority among elementary principals.
but was less important for middle and high school principals. Elementary principals also valued how well teachers got along with colleagues, whereas middle and high school teachers prioritized those who could get along with students.

Subgroup differences were most pronounced for the diversity of the educator workforce. Principals at urban and suburban schools were far more likely to prioritize diversity in hiring than were those at rural schools. Principals at schools with a majority
White student population were less likely to prioritize diversity in their workforce, and those at large schools were more likely to respond that diversity took precedence in their hiring. After regression-adjusting for school locale and ethnicity of the student body, principals of lower-income schools were less likely to agree that diversity of their teacher workforce was a top preference. Instead, principals of lower-income schools overwhelmingly sought teachers with skills in managing student behavior. The low priority some principals place on diversity in hiring aligns with other survey findings that indicate principals seldom receive training on hiring for diversity (Steiner et al., 2022).

**Principals Hired Teachers from a Variety of Preparation Programs, Including Those Providing Alternative Certification**

Given the challenges in hiring teaching staff at the time of the survey, we explored where principals typically found hires. The LTS asked principals how often they sourced teachers from a variety of preparation programs. The LTS did not ask about the kinds of preparation that they would prefer their teachers have, only the reality of their sourcing. Figure 7 shows that most principals hired teachers from educational programs that included at least one year of student teaching or residency experience, although the distribution of responses was relatively even across all traditional sources.

Eighty-six percent of principals at least sometimes hired teachers from alternative certification programs. These programs allow teachers who have not taken a traditional route to teaching (e.g., studying teaching at a college, serving as a student teacher) to pursue a credential. Requirements for these programs vary by state and there are numerous examples of alternative certification programs, including Teach for America and The New Teacher Project teaching fellowships. A large proportion of principals (35 percent) also selected “Other” for this item on the survey, which then prompted the respondent to specify in an open-ended response. In this case, the responses did not coalesce into one or two larger

**FIGURE 7**

*From Where Do Principals Source Teachers?*

<table>
<thead>
<tr>
<th>Preparation Program</th>
<th>Always</th>
<th>Frequently</th>
<th>Sometimes</th>
<th>Never</th>
</tr>
</thead>
<tbody>
<tr>
<td>Undergraduate program with full year or more of student teaching or residency</td>
<td>16</td>
<td>50</td>
<td>25</td>
<td>9</td>
</tr>
<tr>
<td>Postbaccalaureate program with 1 year or more of student teaching or residency</td>
<td>10</td>
<td>48</td>
<td>32</td>
<td>10</td>
</tr>
<tr>
<td>Undergraduate program with 1 semester or less of student teaching</td>
<td>9</td>
<td>43</td>
<td>32</td>
<td>15</td>
</tr>
<tr>
<td>Postbaccalaureate program with 1 semester or less of student teaching</td>
<td>8</td>
<td>42</td>
<td>38</td>
<td>12</td>
</tr>
<tr>
<td>Postbaccalaureate alternative certification</td>
<td>4</td>
<td>34</td>
<td>48</td>
<td>14</td>
</tr>
</tbody>
</table>

Percentage of principals

NOTE: This figure shows the types of preparation programs from which principals reported hiring teachers. Responses come from the survey question: “When selecting teachers, how often do you source teachers from each of the following?” Principals were asked to provide a single response for each preparation program. This figure includes all respondents with nonmissing responses ($n = 1,651$).
themes but were diffused across various sources. However, it is notable that approximately 10 percent relayed some desperation in sourcing teachers. One principal, describing required qualifications, responded, “Do they breathe?” Another answered, “It is more like just trying to find an acceptable candidate. Someone willing to get licensed if they are not currently. It is a desperate situation.” These comments illustrate the unique pressures that many principals faced concerning hiring during this period.

We found few subgroup differences in terms of hiring patterns across traditional preparation programs. The only statistically significant difference was that principals at urban and suburban schools were less likely to hire teachers from undergraduate programs that required a semester or less of student teaching. Principals differed much more in terms of hiring teachers with alternative certifications. When we controlled for school characteristics, we found that principals of elementary schools, schools that predominantly serve White students, and non-rural schools were 5 percent to 7 percent less likely to source teachers from alternative certification programs than were principals of middle and high schools, schools serving primarily students of color, and rural schools. Principals facing staffing shortages were slightly more likely to source teachers from alternative certification programs.

**Implications and Recommendations**

Findings from our survey confirm that in spring 2022, at the height of the omicron variant surge, most principals did not have the necessary staff to adequately cover classrooms. Survey responses indicated that principals did not perceive teaching vacancies to be the primary driver of their staffing issues. Instead, most principals attributed their schools’ coverage difficulties during the 2021–2022 school year to a lack of substitutes, as other state-specific research has established (Goldhaber and Theobald, 2022). Responses from our nationally representative sample of principals make clear that this is not simply a state-specific occurrence; it is a national issue. More than three-quarters of principals reported that they did not have enough substitute teachers, even as districts reported taking measures to attract and retain them (Diliberti and Schwartz, 2022).

Most principals reported that hiring for teaching and nonteaching positions was more difficult during the 2021–2022 school year than it had been in the previous school year. Although labeling the current staffing situation as a national teacher shortage is potentially an overstatement, principals who experienced increased hiring difficulties pointed primarily to declines in applications and accepted offers. This trend is particularly concerning from an equity perspective. Lower-income schools have always experienced challenges with attracting and retaining teacher talent (Dee and Goldhaber, 2017). In our survey, principals at those same schools—who were more likely to attribute their staffing shortages to vacant teaching positions—were significantly more likely to express that their difficulties had grown during the pandemic.

Respondents’ preferences for specific teacher characteristics shed light on how principals conceptualized teacher qualifications during the pandemic. These preferences also have important implications for districts as they consider future hiring practices, particularly given how often principals reported struggling with underqualified applicants. Principals overwhelmingly prioritized alignment of teachers’ mindsets with school vision and culture as their most sought-after quality. Evidence finds that many teachers find open positions and principals recruit candidates by relying on social networks and that strong social ties with school colleagues can promote retention, particularly for teachers of color (Jabbar, Boggs, and Childs, 2022). Far fewer principals prioritized other qualifications, such as alignment of certifications with the needs of their schools, years of experience, classroom management skills, and formal training.

In open-ended responses about teachers’ preparation programs, many principals expressed that they would be willing to work with teachers without standard training—further suggesting that some principals might be willing to “make do” with teachers who are aligned on mindset but lack traditional qualifications. Future research unpacking which aspects of a teacher’s mindset are most important to
principals might therefore have implications for how to better match prospective teachers to schools and the extent to which hiring struggles have been driven by poor matches between applicants and schools. Such research could also provide further insight into how the desire for mindset alignment might limit diversity in hiring.

Our data highlight several concerns that warrant attention. The staffing disparities highlighted in our survey underscore existing inequities, particularly those affecting lower-income schools. Although the results of our survey are tied to a very specific point in time—a particularly tumultuous period during the third pandemic school year—these disparities are not isolated to this period. They have been demonstrated in countless studies over decades; our data simply show that they persisted during the pandemic. Despite pandemic relief funding, for instance, principals at lower-income schools still reported greater challenges than their counterparts at more-affluent schools.

Additionally, we bring attention to principals’ overwhelming preference to hire teachers with similar mindsets as a potential explanation for some principals’ limited emphasis on diversity in teacher hiring (Steiner et al., 2022). Taken together, principals’ emphasis on teacher mindset in hiring, their lack of emphasis on diversity in hiring, and the importance of social networks—which are often racially homogeneous (Busette et al., 2021)—in recruitment and job seeking suggest several avenues for increasing the racial and ethnic diversity of the teacher workforce.

Given these important issues, we highlight several implications:

• Policymakers, educators, and the media should exercise caution when discussing teacher shortages, because the situation is not monolithic. By bringing attention to how hiring needs and preferences differ by geography and school characteristics, we can shift attention to where it is needed. Our findings suggest—as have previous studies—that challenges in filling teaching positions are not universal.

• Districts should carefully inspect how substitute teachers are allocated across schools and revisit efforts to attract and retain substitute teachers. Substitute teachers are not a postscript in current discussions of teacher shortages. Principals see a lack of substitute teachers as a key driver of their staffing struggles. Although districts have increased compensation for substitute teachers over the course of the pandemic, the demand still appears to greatly outpace supply (Goldhaber and Theobald, 2022).

• Districts should consider what they can do to recruit, hire, and retain teachers of color. Our findings suggest that diversity is not a hiring priority for principals who work at schools that predominantly serve White students, yet research indicates that all students benefit from having teachers of color (Blazar, 2021; Cherng and Halpin, 2016). Some suggested avenues for improving diversity across schools include increased pay and loan forgiveness opportunities, organizational changes in hiring practices, and preservice and in-service training that provides principals with strategies for focusing on diversity when hiring (Jabbar, Boggs, and Childs 2022; Steiner et al., 2022).

• States should revisit teacher qualification requirements. This effort could include convening a committee of principals for input. As many states have been reducing the qualifications required to teach (Will, 2022), one reason principals in our survey struggled to hire teachers is that they did not think the available applicants were qualified to be in their classrooms. There is a disconnect. We emphasize that this is also an equity issue, as less-qualified or mismatched teachers (e.g., an art teacher leading math class) are more prevalent in lower-income schools (García and Weiss, 2019).

Principal and district leaders described different, but not conflicting, perspectives on pandemic-era school staffing. Teacher headcounts reportedly increased in most districts, and most principals did not point to vacancies as the primary driver behind their staffing struggles. Instead, teacher absenteeism disrupted principals’ efforts to keep their classrooms staffed. Many districts quickly increased pay
for substitute teachers, but substitutes remained in extremely high demand. Teacher hiring increased in many districts but staffing inequities within districts—already an issue pre-pandemic—might have worsened, particularly for lower-income and rural schools. These conditions left some principals in desperate situations and might help explain why the narrative behind pandemic-era teacher shortages has held so much traction.

Limitations

This report uses nationally representative survey data to provide insights into the state of school staffing across the country. We highlight several limitations and caveats to these findings. First, the presented analysis is purely descriptive and should not be interpreted causally. Second, our results are based on self-reported responses from principals whose perceptions might differ from actual trends, a limitation present in all survey research. Third, respondents might have interpreted specific terms in the survey differently from one another. As an example, principals were asked whether specific factors were “major barriers” or “minor barriers” to hiring. Principals subjectively determined what is a “major” versus a “minor” barrier from their own perspectives, and perspectives will differ across principals. Fourth, the survey seldom asked principals to explicitly quantify aspects of their classroom staffing. We were therefore often unable to distinguish whether a principal who reported staffing issues was facing a severe or moderate staffing issue. Finally, we again caveat that the timing of the survey—March and April 2022—might affect the interpretation of our results. The surveys were administered just following the peak of the omicron variant surge. Additionally, both months are seasonally weak hiring months (DeLaRosa, 2022), although many of the questions in the LTS are worded to reflect the entirety of the school year.
Learn Together Survey Data and Methods

In this report, we used responses from 1,694 K–12 public school principals who responded to the 2022 LTS to examine the school staffing climate in the United States. In this report, we report sample-wide and subgroup-specific means and proportions of variables of interest, weighted using a set of nationally representative weights described in further detail in the LTS technical documentation (RR-A827-9, www.rand.org/t/RRA827-9).

To compare responses for principals in schools with different demographic profiles, we matched LTS responses to school-level data from the 2020–2021 Common Core of Data (CCD). On select survey items, we explored whether principals’ responses differed because of their school context (i.e., school locale), the characteristics of the students at their school (e.g., student poverty levels), or the grades served. We used the percentage of students enrolled in FRPL as a proxy for student poverty levels and characterized schools with more than 50 percent student enrollment in FRPL as lower income. We also determined whether a school served mostly students of color through data showing the percentage of students enrolled at that school who were White. We grouped principals into three grade bands based their report of the grades the school served: elementary (kindergarten–5th grade), middle (6th–8th grade), and high (9th–12th grade). In instances in which a principal’s school spanned grade bands, we used the CCD’s determination where available. For the 28 schools with missing CCD determinations, we did not assign grade categorizations and the schools were omitted from any analyses focused on grade bands. In total and broken out into different subgroups, our sample consisted of 58 percent elementary principals, 19 percent middle school principals, and 23 percent high school principals; 48 percent of principals serving at schools with at least 450 students and 51 percent of principals at lower-income schools; 47 percent of principals at schools predominantly serving non-White students; 27 percent of principals at urban schools, 30 percent of principals at suburban schools, and 44 percent of principals at rural schools.

Unless otherwise noted, we discuss differences among school subgroups that are statistically significant ($p < 0.05$) on pairwise comparisons. Differences are adjusted for observable school-level characteristics (e.g., poverty level, student racial and ethnic composition, locale). We did not make statistical adjustments for multiple comparisons because the intent of this report is to provide exploratory, descriptive information rather than to test specific hypotheses or causal relationships.

Finally, we asked several questions for which principals were able to indicate “Other” as a response. These principals were then prompted to provide open-ended responses, which we analyzed by identifying emergent themes and inductively categorizing each response. We compared, merged, and split these emergent themes through several rounds of coding until each theme was distinct from the others and the majority of responses were accounted for (Charmaz and Belgrave, 2012; Natanson, 2022). We then analyzed patterns in the frequency of these themes and focused on presenting the most-prevalent themes.
Notes

1 The National Center for Education Statistics (NCES) provides data on the percentage of a school’s student body that is White. Schools serving primarily students of color are schools with a student body population that is less than 50 percent White. The convention for classifying students by race and ethnicity includes Hispanic as a distinct category. The categories are White, Black, Hispanic, Asian, Pacific Islander, American Indian/Alaska Native, and Two or More Races.

2 Diversity was not defined in the survey and principals were not given any additional clarification on what kind of diversity (e.g., diversity of race, ethnicity, gender, thought, training, or background) in their teacher workforce to consider.

3 Teacher qualifications selected at by 5 percent or less of principals consisted of alternative certifications, completion of a master’s degree or higher, National Board certification, and experience with remote or hybrid teaching.

4 Teachers of color are defined as teachers who do not identify as White.
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About This Report

In this report, we draw on surveys of principals from the American School Leader Panel (ASLP), which is a nationally representative sample of more than 7,000 principals across the United States. Principals offered perspectives on the realities of teacher shortages, pointing to substitute teacher shortages and hiring issues rather than vacancies as barriers to sufficient classroom coverage and giving insight into hiring priorities. The ASLP is one of three survey panels that make up the American Educator Panels (AEP), which are nationally representative samples of teachers, school leaders, and district leaders across the country. The panels are a proud member of the American Association for Public Opinion Research’s Transparency Initiative. For more information about any one of the survey panels, visit www.rand.org/aep.

If you are interested in using the AEP data for your own surveys or analysis or in reading other publications related to the AEP, please email aep@rand.org or visit www.rand.org/aep.

RAND Education and Labor

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