



STRENGTHENING THE PIPELINE: Landscape Analysis

Supporting and Elevating the Teaching Profession



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1 Introduction

Throughout the nation, educators play a crucial role in shaping the path to success for our students. Every day, teachers inspire the next generation of future leaders, accelerating the formation of a promising workforce for our country's future.

However, for decades, the education system has grappled with persistent challenges in attracting, recruiting, and retaining high-quality educators. Lasting change has been hard to come by in education as the field historically moves slowly to ensure new adjustments, pilots, and promising programs are set to positively impact our systems.

Yet, recent years have known no shortage of changes to the landscape, particularly among the educator workforce. District and state leadership alike are positioned to rethink their comprehensive human capital approach to educator talent, fueled by challenging factors such as:



Fatigue from COVID-19 recovery efforts



A workforce that is progressively aging and nearing retirement



Generational and social discord within the profession





② The State of Affairs

The February 2022 “[Addressing Teacher Shortages](#)” report from The New Teacher Project (TNTP) opened with an alarming synopsis of the current need and dramatic impact:

Schools across the country are facing their toughest staffing challenges in recent memory. A large number of teachers are thinking of quitting, taking leaves of absence, or actually resigning. Additionally, there is a depleted pool of substitute teachers, and fewer people applying to fill vacancies in a job market that is steering workers away from relatively low-paid careers like teaching.

It's all happening at a critical moment when students need diverse and effective teachers more than ever to help them accelerate back to grade level after the disruption of the past two years.

Longstanding challenges to the teaching profession, combined with exacerbated negative industry experiences, have placed a significant strain on the current – and potential future – workforce of teachers.

Additionally, the demand for essential school-based staff extends beyond teachers, with roles such as bus drivers, paraprofessionals, nurses, health coordinators, tutors, after-school workers, and other support positions presenting increasing difficulties in staffing.

Whether on school grounds or in the classroom setting, the presence of highly effective, well-trained professionals is essential to accelerate achievement and equip students for success beyond the four walls of the classroom. As educational systems grapple with their current reality and plans for the future, a comprehensive human capital strategy is essential to effectively addressing schools’ immediate and emerging talent needs.

This landscape analysis is designed to outline:

- The current state of the educator shortage.
- The variety and nuance of the challenges faced.
- Promising opportunities for redesign embedded in a system’s potential human capital strategy.

National Landscape by the Numbers

Before systems can strategically address their opportunities for redesign and reimagination, it is essential to understand the country's teacher shortage and educator landscape. Researchers have been reviewing emerging trends for years, and both local and national outlets alike have covered the reported staffing crisis well before the pandemic. Across the board, the widening gap between decreasing professional talent, a limited pool of interested professionals, and an increased need for high-quality educators is known to be deeply connected to longstanding issues within the profession.



Before the COVID-19 pandemic, the national teacher shortage was a growing concern.

In its 2016 report titled "[A Coming Crisis in Teaching](#)," the Learning Policy Institute estimated that districts would start the 2017-2018 school year with more than 110,000 unfilled openings. The same report projected that shortages would exceed 300,000 in 2021, with a particularly significant shortage of special education teachers. The report stated, "In the 2015–16 school year, 48 states and the District of Columbia reported shortages in special education ... In a 2014–15 educator supply and demand survey, all 10 special education subgroups were listed as severe shortage areas, comprising more than half of all severe shortage areas."

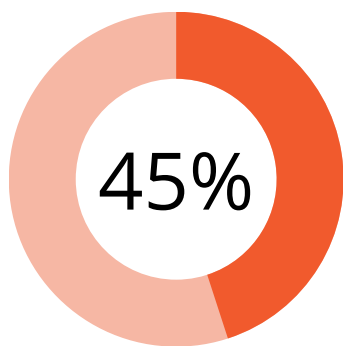
For the decade preceding the pandemic, reports have warned of increasing shortages, emphasizing the challenge of filling the hardest-to-staff positions most essential for high-need students. This gap was even more pronounced for special education teachers; for instance, in 2015, nearly half of all entering special education teachers in California were underprepared for the classroom.

National Landscape by the Numbers

Currently, **more than 8 in 10 public schools continue to grapple with vacancies in teachers**, in addition to support staff like aides, bus drivers, and mental health professionals.



It is important to clarify that there are likely enough people to fill the expected vacancies in many of these positions. However, the expectation the field must have for itself is to ensure there is a pool of candidates that reflect the high value our nation places on a quality public education. The goal should not merely be to fill the spot; instead, any discussion of shortages should focus on scarcity of well-prepared, effective, and intentionally placed individuals in our classrooms and schools.



Optimistically, fewer administrators reported starting this school year (2022-2023) feeling more short-staffed than the previous year ¹.

New data from the School Pulse Panel, a nationally representative survey conducted in the summer of 2023 and recently released by the National Center for Education Statistics, revealed that **only 45% of school administrators reported feeling understaffed before the start of the 2023-24 school year, down from 53% in 2022-2023** ². However, challenges persist for many levels of leadership.

Student Achievement and Educator Effectiveness

The significant human capital challenges faced extend beyond teacher vacancies, and the responsibility to mitigate these challenges should not rest solely on district and state leadership. Policymakers, private sector leadership, and the broader public must also play crucial roles as necessary actors to collectively address the compounding factors and challenges. Ultimately, these efforts are on behalf of teachers and students alike.

Research has consistently shown that student achievement and outcomes are tied to the effectiveness of classroom teachers and their school leaders ¹. Effective teachers deliver lasting benefits for students' long-term outcomes in various areas including ²:

Academic performance in the classroom



Postsecondary academic achievement



Higher salary earnings



As teachers gain experience, there is a positive correlation with improved student performance across various measures of success. In addition to measures of teacher effectiveness on student achievement, studies show that the length of a teacher's tenure in the classroom is positively associated with student achievement gains throughout a teacher's career ³. Over years and decades spent as instructors, strong student attendance and academic achievement reflect the development of an educator's expertise and ability.

Given the decline of student achievement in recent COVID-19 years, compounded by challenges felt most acutely by high-needs students, it is essential that every classroom, at every level, have a high-quality professional equipped to meet and exceed this moment in time for our students' opportunities and advancement.

¹¹ "The New School Staffing Landscape, in Charts," Education Week

² "The New School Staffing Landscape, in Charts," Education Week

³ Chetty, Raj, John N. Friedman, and Jonah E. Rockoff, "Measuring the Impacts of Teachers II: Teacher Value-Added and Student Outcomes in Adulthood,"

²⁴ <https://usprogram.gatesfoundation.org/-/media/dataimport/resources/pdf/2016/12/met-ensuring-fair-and-reliable-measures-practitioner-brief.pdf> <https://www.aeaweb.org/articles?id=10.1257/aer.104.9.2633>

³ https://learningpolicyinstitute.org/sites/default/files/product-files/Teaching_Experience_Report_June_2016.pdf



3 Longstanding Challenges to the Profession

While educational systems recognize the importance of having high-quality instructors, there is not always a sufficient pool of individuals ready to fill such positions. Long-standing challenges to the teaching profession have made it increasingly difficult to not only recruit but retain adults eager to work with students of all backgrounds, levels and experiences.

The nation's educator workforce reflects four primary challenges to fully staffing systems with high-quality, well-trained professionals that students most need:



Financial

Cost barriers discourage prospective teachers from entering the field.

Educator expenses quickly add up, including degree tuition, testing fees and certification costs. Additionally, mandatory clinical experiences often demand participants to work without compensation to complete their necessary hours, dissuading candidates from starting or completing programs. Many individuals cannot afford the opportunity cost of lost income, impacting disproportionately those from low-income communities and individuals with ongoing financial responsibilities (cost of living, car payment, supporting family members, etc).

Similarly, the limited compensation and restricted financial mobility associated with being a teacher pose significant challenges for many professionals. Teachers, paraprofessionals, and transportation staff alike recognize their wage is only one component. With the rising cost of living nationwide, many report they are unable to afford housing in their work locations. A smaller, yet still significant, segment of these workers acknowledges relying on government or community assistance due to inadequate baseline salaries to support themselves or their families. The financial realities of becoming and remaining an educator persists across systems of various scale and location across the country.



Recruitment

The workforce does not always reflect the population of students it serves.

Growing discrepancies between changing student bodies and current educators makes it challenging for students to see themselves reflected in their teachers. Yet, research indicates that a diverse educator workforce has positive impacts on all students, including academic achievement, engagement and social development. Education leadership is increasingly seeking highly-motivated, impactful educators from all backgrounds to connect with the stories of their students. However, attracting and retaining such talent can be hard.

Further, the next eligible generations of teachers hold different priorities for work culture and chosen industries. These expectations are becoming increasingly misaligned with the reality of the teaching profession, causing strain and strife within education systems and talent pools.



Preparation

New teachers are often unprepared to succeed in their first years.

While experienced teachers contribute to better student performance across various measures of success, districts may struggle to identify first-year or early career teachers capable of effectively advancing students' academic achievement given educator inexperience and high turnover.

By and large, calls for innovation in higher education, combined with the reality of many working learners, provides significant room and opportunity for districts to reimagine what the strongest, most sustainable onramps look like for various talent needs.



Retention

Teachers acknowledge increasing reasons to leave the profession, and fewer reasons to stay.

The reality of building culture, lack of support or professional benefits can accelerate fatigue and early departure. Educators are hard-pressed to see paths for advancement or economic mobility while remaining in the classroom. This challenge intensifies when adjacent industries offer higher compensation for the same high-quality instructional leadership.

Increasingly, teachers lament the state of the profession, calling for significant changes and restructuring to prove viability for their personal lives and professional callings.



4

Newest Challenges to the Profession



While the longstanding barriers of financial constraints, recruitment challenges, preparation issues, and retention difficulties have been forefront of mind for educational systems for some time, newer challenges have increasingly made it difficult to fully staff buildings.



Aptitude for the Current Working Conditions and Professional Regard

Building improvements and working conditions are becoming significant reasons for:

- Staff report their decision to leave.
- Prospective workers expressing disinterest in the reality of the teaching profession.

“Working conditions in schools are student learning conditions.”

- Henry Tran, education professor at the University of South Carolina

Further, given the heightened profile of the educator’s role in recent pandemic years, many teachers question whether the traditional motivation of long-used “goodness of heart” is reason enough to stay. The teaching profession, much like other female-dominated professions (e.g. nurses and healthcare workers) has long been characterized by a martyrdom complex. Statements like “we’re here because it fulfills us, professionally and emotionally,” or “it’s a calling,” are falling increasingly short. Teachers hesitate to recommend their path to students, realizing they are recruiting against their own profession as a lucrative career. Sentimentality isn’t enough, as research suggests, highlighting recent impacts from the mental burdens, lack of economic mobility or financial constraints of any teaching position. One educator reflects, “We should not have to struggle to take care of ourselves and our families to do this.”



National Discord and Political Strife

Teachers are increasingly reflecting on the challenges of external factors in the national landscape that affect their ability to comfortably and safely work with students day after day. Concerns include school shootings, vitriolic school board meetings, threatening parent behavior, and curriculum investigations, leaving educators **apprehensive with the volatile conditions in certain communities.**

Further, in this increased partisan era, educators feel unprepared to navigate an growing number of complex and nuanced geopolitical topics, such as racial strife or global warfare. Without strong leadership, building-level support or clear district policies for teachers to engage in, many are left feeling uncomfortable and uncertain about how to navigate the realities of the world with the day-to-day needs of the classroom.



Representation Among Demographic and Generational Differences

Demographics

Across the country, discrepancies between current educators and changing student bodies can make it difficult for students to see themselves reflected in their teachers. As students seek representation in their classroom leaders, teachers, too, look for reflection in their building leaders. The school's goals, perceived support level, and potential for leadership trajectory are crucial factors contributing to an educator's impact and likelihood to stay in the classroom for a significant number of years.



The longstanding **challenge of recruiting teachers of color**, particularly black male educators, persists in the profession. As public-school communities diversify, teachers from diverse backgrounds, experiences, racial and ethnic backgrounds, as well as socioeconomic and ability levels, are necessary to reflect the varied stories and details of an ever-changing student body.

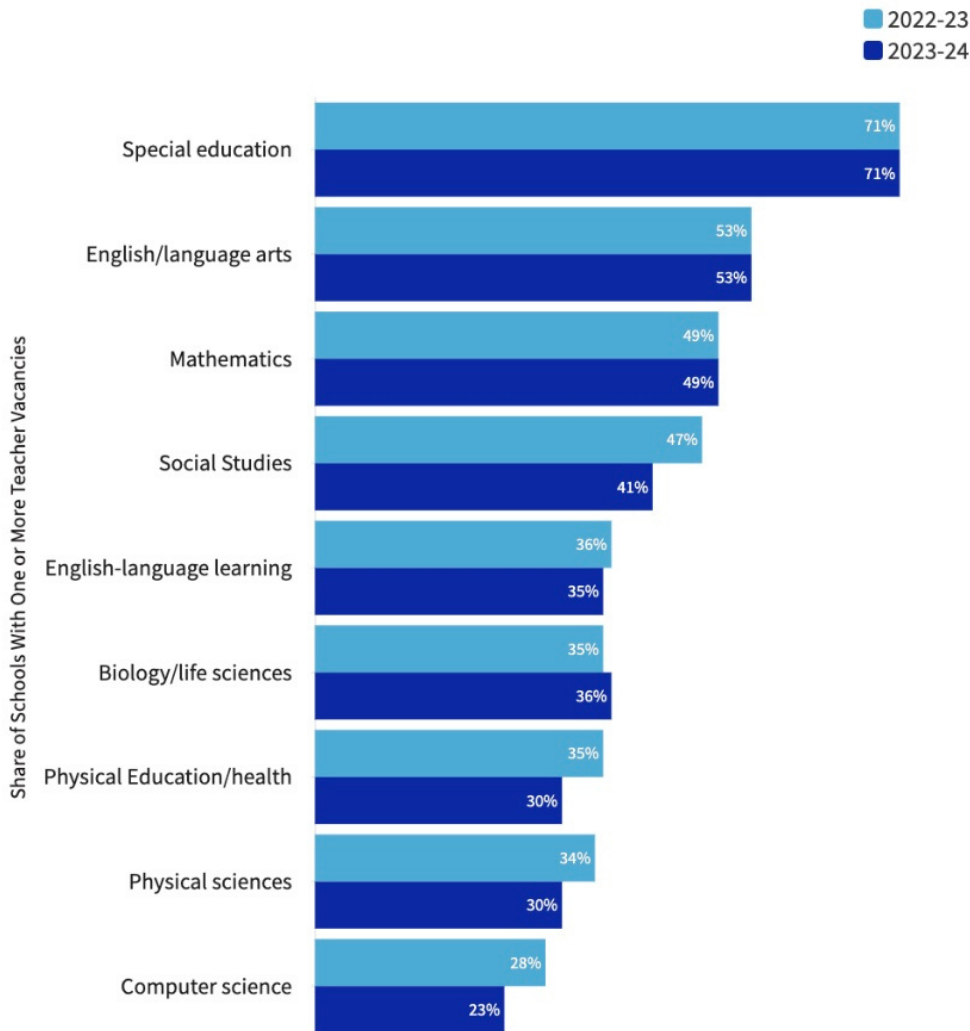
Generational Differences

District and state-level leadership are increasingly encountering a representation gap or lack of connection to the profession with younger generations, specifically **Millennials and Gen Z. These younger generations express increased dissidence toward the teaching profession.** Differences in communication styles, building culture, employment experience, and job responsibilities now reflect varying expectations between an aging leadership and younger, untapped talent.



Ultimately, both longstanding issues and emerging difficulties to the teaching profession are interconnected. Challenges faced by one building can impact others, and the ripple effects have a wide-reaching impact across districts, states and educational systems.

5 Significant Staffing Gaps

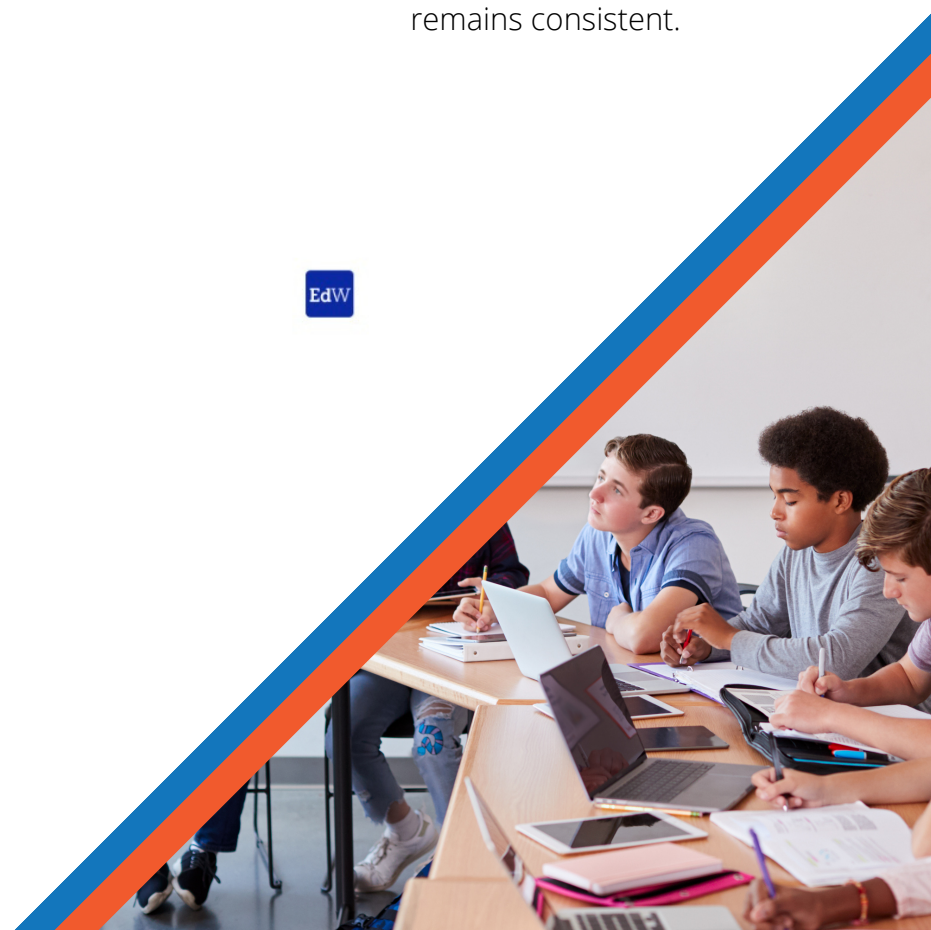


Positions Most Challenging to Fill

By and large, districts reported fewer vacancies challenges at the start of 2023-2024 school year compared to the prior academic calendar. However, the types of positions buildings are hard pressed to fill remain the same with Special Education being the most challenging teaching area to staff.

Overall, the number of districts still trying to fill positions in key subject areas such as English and Language Arts, Mathematics, and Biology and Life Sciences, remains consistent.

SOURCE: National Center of Education Statistics School Pulse Panel

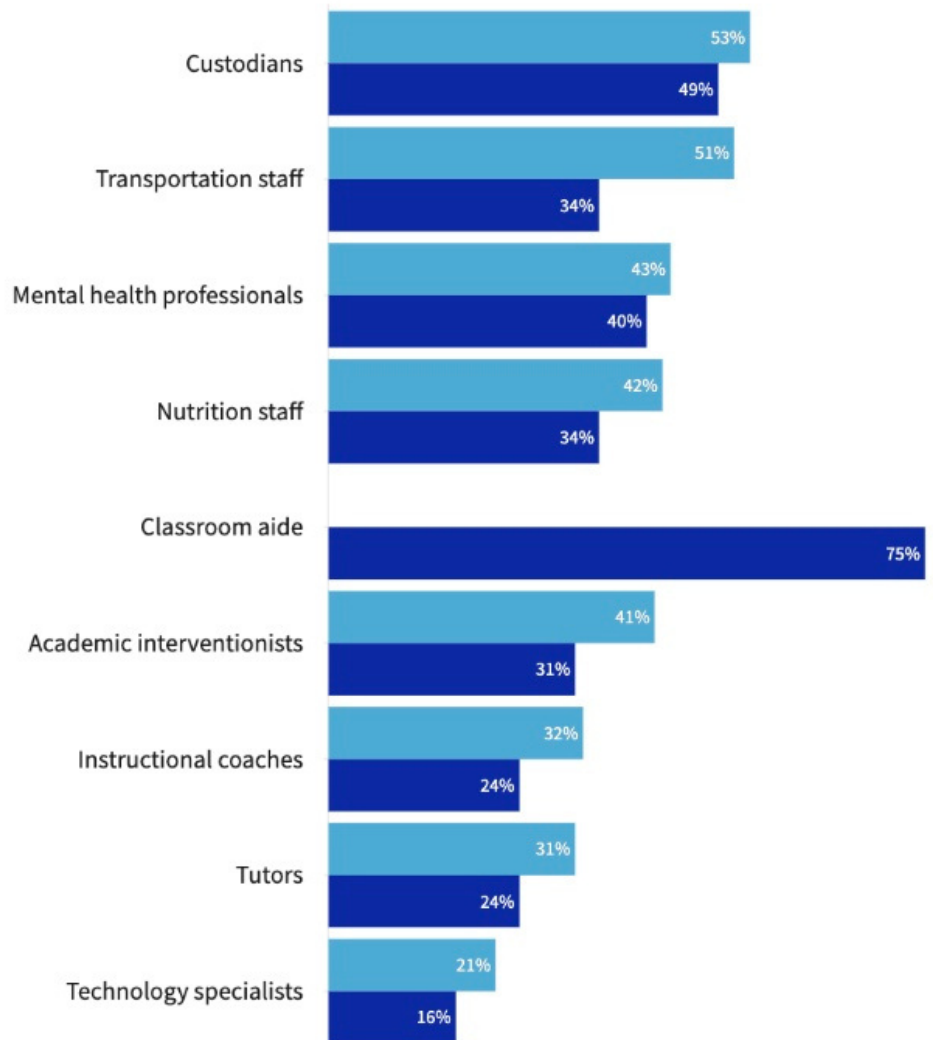


Acute staffing challenges are still felt outside the classroom, affecting various school-based staff positions.

Roles such as custodians, transportation staff, mental health professionals, nutrition workers, academic interventionists, instructional coaches, tutors, and specialists (e.g. technology, computer science) all saw a decrease in vacancies.

■ 2022-23
■ 2023-24

Share of Schools With One or More Vacancies



NOTE: SOURCE: National Center of Education Statistics School Pulse Panel • Classroom aide data are only available for 2023-24.

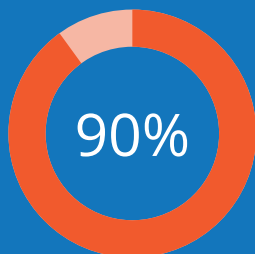


Still, the shortage is nuanced, and capturing accurate numbers proves challenging. Real-time reporting at the district and state levels varies significantly nationwide, posing difficulties for national outlets and institutions in consistently capturing the current staffing landscape.

Realities of Non-Teaching Support Staff

The teacher shortage has drawn a national spotlight on the critical role other school support staff play in the daily operations of public schools. This has sparked debates on how non-teaching staff should be recruited, compensated and trained. Districts and states continue to grapple with the short-term needs in their buildings and the call for greater reform.

Comprising more than half of the nation's K-12 workforce, there are more than one million non-teaching staff members essential to the daily operation of the nation's schools. According to a nationally representative EdWeek Research Center survey in May, "Nearly **90%** of paraprofessionals, instructional assistants, bus drivers and other classified workers who answered a nationally representative EdWeek Research Center survey in May **said they at least somewhat agree that their jobs have a big impact on student learning.**"



Further, "Slightly more than half said the recent nationwide crush of staff shortages has worsened student behavior, and 48% said those issues have affected students' learning."

Paraprofessionals

- The wide spectrum of required skills leads to vast differences in roles. For example, some paraprofessionals are bilingual and provide dual-language instruction, while others focus on basic student needs.
- Despite low pay, **78% of paraprofessionals are satisfied** with their jobs and plan to remain in their positions (*Education Week*). For many, the primary reasons to stay include the flexible schedule, while others are motivated by their commitment to the students.



Bus Drivers

- 73% of survey respondents said they stick with these jobs because they like working with kids.
- **Only 5% said the pay was better than other jobs they could find** (*Education Week*).



Substitutes

- "Administrators describe 'scraping the bottom of the barrel' with 'less than ideal' substitute teachers," university researchers found.
- Increased pay is not the sole barrier to recruitment or retention. "Similar to regular teaching jobs, substitute teachers care about their earnings as well as working conditions." (Liu)

Though the positions vary - tutors, nutrition workers, health care professionals, instructional specialists - the reasons for the challenges ring true: limited pay, challenging working conditions, intensified work environments, greater student needs, and diminishing support.



⑥ Disproportionate Impact to High-Needs Students

When schools lack adequate staffing, students with the greatest needs suffer disproportionately.

Students with disabilities and English-language learners cannot access required specialized services. Students from impoverished families, and those in rural areas who live far from their school building, lose essential transportation and crucial learning time in school. Above all, students who need extra academic assistance miss out on instruction when teachers and support personnel are stressed, demoralized or absent. Studies show that students learn more when their teachers are less frequently absent, when the ratio of nurses to students is lower, and, particularly for students of color and students in high-poverty schools, when multiple teaching personnel and classroom aids are present (*Education Week*).

7

RECOGNIZING CONTEXT IN THE LANDSCAPE AND AT THE LOCAL LEVEL

The variety of challenges felt at the local level are widely recognized. It remains essential for leadership to review their own context with appropriate nuance to best address challenges and plan for future solutions.

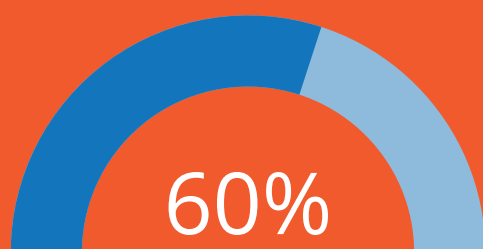
Overinflated vacancy numbers

Districts' listings for vacancies could be misrepresentative due to the increase in federal funds and the creation of newest positions districts were able to post. Reports indicate higher vacancy rates among districts that received more federal pandemic recovery grants, suggesting that they may be creating new teaching positions rather than trying to replace teachers who left or retired.



Hiring more specialists

The share of schools offering wraparound services or community schools **increased significantly from 45% to 60% in the last year**, according to the School Pulse Panel data. More than **a third of surveyed schools now offer tutoring, mentoring and social services**, with some in larger districts even including dental services. Notably, many instructional support staff have been hired using the \$180 billion that Congress allotted to schools in three rounds of pandemic relief aid.





Limited insight into reporting and data accuracy

Though many states have invested significant capacity and funds into improving data management systems and public reporting efforts, there are still many blind spots in the data on teacher and staffing shortages. The reality of systems changes frequently, and the effort to self-report across various systems, measurements and variables can cause issues when looking to pull clean and comprehensive data.



As many states acknowledge, no two districts or systems are perfectly alike. Each context - rural, urban, or suburban - brings its own set of challenges and unique opportunities, emphasizing the importance for each system to understand their local reality in the context of the grander landscape.



THE CALL FOR CREATIVE SOLUTIONS

There is a renewed sense of urgency to creatively address the opportunities for recruiting and retaining a strong, diverse workforce. This call for solutioning is needed at all levels, including both teaching and non-teaching positions, district leadership and external capacity.

Below are several emerging areas for innovation and reimagination, embedded within the context of a comprehensive human capital approach.



Licensure flexibility

Seven in ten administrators said they simply got too few candidates, particularly for hard-to-fill subjects like special education.



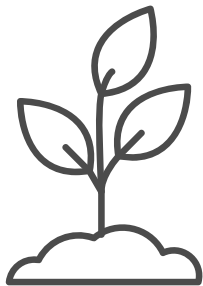
Nearly that many reported the candidates who did apply weren't qualified. This pattern has led to varied support for efforts to lower the certification requirements. In many states, leadership at the agency, board, and elected level has sought to make teacher licensure more flexible through licensure grade bands, licensure for out-of-state teachers, alternative licensure, and testing requirements.





Alternative Paths to Recruitment

Grow Your Own, registered teacher apprenticeship programs, and residency models each maintain that the most effective teachers with the best staying power are recruited to schools within their shared communities and are trained to meet local needs. Each model takes a different approach to candidate recruitment, preparation, mentorship, and pay. While some commonalities can be found between program models, each is highly specific to local needs and candidate pools, and details can vary greatly from program to program.



Grow Your Own

The key components of Grow Your Own educator apprenticeships include:

- Progressively paid on-the-job training experience
- Coursework that leads to degree or credential attainment
- Recruitment and training focused on local community needs

Registered Teacher Apprenticeship Programs

The registered teacher apprenticeship model is the newest iteration of educator preparation strategies that seeks to address shortages, diversify the teaching profession, and reduce barriers to the profession.



Tennessee's Teacher Occupation Apprenticeship program is the first K-12 teacher apprenticeship program registered with the U.S. Department of Labor, demonstrating compliance with rigorous industry standards as approved by USDOL.

Teacher apprenticeships must operate at no cost to teacher candidates. While the recently federally approved teacher occupation apprenticeships share much of the same theory and goals of Grow Your Own and teacher residency programs, the registered apprenticeship designation signifies that approved programs have met the U.S. Department of Labor's requirements for quality and rigor, as well as providing state and federal workforce funding opportunities.



Residency Models

These federally funded programs placed graduates of bachelor programs into schools for a full year of student teaching under the care of expert classroom teachers. During this yearlong internship, students would also complete coursework for the sponsoring university.

The community-minded focus and the minimum full school year of clinical experience before becoming a full teacher found in early elite teacher residencies can be seen in modern teacher residencies, differing from traditional teacher preparation and alternative certification programs. Traditional student teaching typically lasts between 10 and 15 weeks, and alternative preparation programs may not include any supervised clinical experience prior to teacher licensure.





Develop Additional Educator Grow Your Own Programs

The initial success of and interest from EPPs, districts, community partners, and national policy leaders shows a promising path forward for the future of Grow Your Own apprenticeship models.

Teaching is not the only profession experiencing shortages in the education field. Similarly, shortages of school leadership, school mental health professionals, and other non-teaching education staff threaten schools' ability to provide a well-rounded educational experience and environment to all students.

With increased interest in innovative educator preparation pathways, states are exploring new Grow Your Own models for additional school-based professionals. Whether school districts need highly qualified school leaders who are knowledgeable of and committed to their community, or non-teaching support staff like bus drivers and school nutrition personnel, the flexible nature of Grow Your Own models allows for creativity and innovation in schools across the state and country.



Day and Time Scheduling Flexibility

Increasingly, given staffing strains and building needs, leadership has looked to reimagine the scheduling of the school day.

Efforts to rework the schedule can help with:

- Transportation routes
- Opportunities for student work-based learning modules
- Innovative school programs and hybrid approaches
- Tutoring schedules
- Student-teaching pairings



State Legislative Responses to Teacher Shortages

While many states have taken programmatic approaches to addressing teacher vacancies with the help of emergency COVID-19 relief funding, state legislatures are also working steadily to find short- and long-term solutions to challenges facing their teacher workforces:

Recruiting Retirees

Georgia and Louisiana legislatures passed bills that would allow districts to recruit retired teachers to fill critical shortage areas while allowing the recent retirees to earn a paycheck and keep their state retirement benefits.

Teacher Loan Forgiveness

While the U.S. Department of Education works to increase Pell Grants and extend public service loan forgiveness to more borrowers, including educators, states are similarly exploring options that would make the cost of traditional higher education more affordable through loan forgiveness and scholarship opportunities in Kentucky and Mississippi, respectively.

Alternative Pathways to Licensure

Legislation in Alabama, Mississippi and South Carolina would lower the threshold to become a teacher by reducing the time it takes to earn licensure, making it easier to teach with an emergency credential, and create other abbreviated alternative teaching pathways.

Salary Increases

As teacher salaries have struggled to keep pace with earnings for professionals with similar educational backgrounds, many states have passed legislation to raise teacher pay. Tennessee's 2022-2023 budget included a three percent raise for teachers. Legislatures in New Mexico, Alabama, and Mississippi also passed legislation that raised their states' teacher pay ⁴.

⁴ <https://www.nbcnews.com/news/us-news/states-raise-teacher-pay-pandemic-shortage-can-retain-educators-rcna25447>

9 Conclusion

Understanding the causes and impacts of educator shortages, the research that supports key tenets of new programming and emerging innovative models, the longstanding professional context, and the anticipated trajectory are all essential efforts.

As key stakeholders work to maintain program fidelity and drive ongoing innovation in the educator sector, a picture of the past and present challenges will help inform future solutions and advancements for the field.

Additionally, sustained financial investment and programmatic support from state and district leadership allows school systems to focus their resources, time, and expertise on effectively training and supporting future educators who play that critical role in student readiness and academic acceleration.