

Addressing the Education Crisis How to Navigate School Staffing Shortages The education sector is currently facing an unprecedented staffing shortage crisis, with schools across the nation struggling to fill vacant positions for teachers and support staff. As we navigate the challenges created by these shortages, it is essential for schools to seek out innovative solutions that address the root causes of this challenge.

This white paper will provide a comprehensive analysis of the current crisis, explore its impact, and offer recommendations on how schools and educational staffing agencies can work together to build a sustainable and thriving educational environment.

The Current State of School Staffing Shortages
The Connection Between Staffing and Success
Recommendations for Schools and Policymakers
The Role of Educational Staffing Agencies in Addressing Shortages
How Managed Service Providers Fit into the Picture
Conclusion
References

The Current State of School Staffing Shortages

School staffing shortages have become a persistent problem for schools in recent years, and the crisis is worsening.

According to the National Center for Education Statistics' School Pulse Panel, **45% of U.S. public school reported feeling understaffed heading into the 2023-2024 school year. The data also revealed that 79% of schools reported difficulty filling teaching positions**^[1].

The factors causing this shortage crisis include:

High teacher turnover rates: According to a 2023 report from the National Center for Education Statistics, nearly 8% of teachers leave the profession annually, with even higher rates in low-income area schools^[2]. This turnover is often attributed to the challenges of working in the educational environment. The consequences of high teacher turnover are far-reaching. Not only does it contribute to the overall shortage of qualified educators, but research from the American Educational Research Journal also shows it has a detrimental impact on student achievement and school stability^[3].

Teacher burnout: Another factor worsening shortages is the pervasive problem of teacher burnout. According to a 2022 Gallup Poll about occupational burnout, 52% of K-12 teachers reported feeling burnt out at work always or very often, outpacing all other industries^[4].

The survey suggests that inadequate salaries, lack of mental health support, lack of teacher staffing, and high workloads are often the causes that lead to burnout and attrition. Even more troubling, the 2023 Merrimack College Teacher Survey conducted by the EdWeek Research Center found that 35% of teachers say they're likely to quit and find another job outside of teaching within the next two years^[5].

Another 2022 survey from the National Education Association revealed that 86% of the union's members say they have seen more educators leaving the profession or retiring early since the start of the pandemic^[6]. **Financial challenges:** Another major factor in staffing shortages is the financial challenges that educators often face. A 2024 report from the National Education Association shows teacher salaries have not kept pace with inflation, finding that teachers on average, are making 5% less than they did 10 years ago^[7]. This often leads teachers to seek out positions outside of the teaching field, since they tend to offer more pay than teaching jobs. In fact, the Economic Policy Institute reported in 2023 that teachers earn 26.4% less than other similarly educated professionals, marking the worst that figure has been since 1960^[8].



Inadequate professional development and support: Limited opportunities for growth and advancement also seem to be a factor that contributes to dissatisfaction and turnover. A 2023 survey conducted by the National Center for Education Statistics found **97.2% of former teachers reported having better opportunities for professional advancement, promotion, or professional development in their new positions**^[9], while a 2024 report from the Pew Research Center revealed, **49% of teachers are not satisfied with the access they have to job essential resources or opportunities for training or development**^[10].

This highlights how there is a lack of adequate training and development opportunities for teachers, helping drive them to positions out of education that offer better resources.

Further supporting the inadequacy of teacher training resources, a 2023 Education Week report points out that studies over the past decade have shown that most of the professional development for teachers does not meet the federal standard for highquality^[11]. Beyond advancement opportunities, teachers, especially new ones, need robust mentoring, professional development, and support from administrators and senior colleagues to thrive and become long-term teachers.

In fact, a report from the National Centers for Education Statistics found providing mentoring and induction programs for new teachers can help keep more of them in the profession, while early career mentoring can help new teachers become more effective^[12].

Working conditions: Another major factor impacting shortages are the working conditions teachers are faced with. These conditions, such as the heavy workload, low pay, and lack of a work-life balance, have left teachers so unhappy that the vast majority would not recommend teaching as a profession, according to the 2024 Voices from the Classroom Survey conducted by Educators for Excellence^[13]. The survey revealed that only 16% of teachers would strongly recommend the profession, while only 19% think it is a sustainable career choice. Furthermore, the 2023 survey conducted by the National Center for Education Statistics found that 49.6% of teachers who left the field report having better working in their new position^[14].

Adding to the challenging working conditions, schools often lack adequate resources and supplies which causes more financial challenges for teachers as they have to reach into their own pockets to buy school-related supplies.

A 2023 report from the National Education Association, revealed that a staggering 94% of teachers used their own money to buy classroom necessities, spending on average between \$500 and \$750 of their already tight personal budgets per year^[15]. Lack of diversity: While over 50% of U.S. public school students identify as children of color, the 2024 Voices from the Classroom Survey noted that only 20% of teachers are people of color and 40% of U.S. public schools do not have single teacher of color^[16]. This can be attributed to teachers of color frequently experiencing isolation, microaggressions, and overt discrimination from colleagues and administrators, according to a study published in Urban Education^[17].

As a result, potential teachers of color may feel hindered in joining the profession, helping to further exacerbate school staffing shortages. While the challenges faced by teachers of color have a great impact on prospective educators, they are also causing many current teachers of color to leave the profession. In fact, a 2023 report from the RAND Corporation noted that African American teachers were significantly more likely to leave the field than their white peers^[18].

52% of current teachers would not advise a young person starting out today to become a teacher



Declining teacher preparation enrollment: Data from a 2023 Education Week report reveals the number of people enrolled in a teacher-preparation program decreased by 36% from 2009-2021^[19]. This decline in pursuit of teaching careers is causing the pipeline of qualified candidates to shrink, and will only put further pressure on already short-staffed schools.

Even more troubling for the future of the teacher pipeline, findings published by the Pew Research Center in 2024 show that 52% of current teachers would not advise a young person starting out today to become a teacher^[20].

Support staff shortages: The staffing shortage is not limited to teachers alone. Schools are also facing a shortage of support staff, such as counselors, therapists, and nurses. According to the American School Counselor Association, the 2022–2023 national student-to-school-counselor ratio was 385:1, far exceeding the recommended ratio of 250:1^[21].

Further supporting that there is a growing shortage of support staff, the 2024 School Pulse Panel from the National Center for Education Statistics revealed that 80% of schools had trouble filling non-teaching roles for the 2023-2024 school year^[22]. The data shows that this issue is particularly pronounced in high-poverty areas, where 79% of schools reported in 2024 needing to find classroom aides, who are vital to helping teachers and students.

This shortage of support staff can lead to teachers being overburdened, which can fuel burnout and further departures from the field.

These factors contribute to a complex and multifaceted staffing crisis that requires a comprehensive and sustained effort to address. Without addressing these root causes, the severity of school staffing shortages could continue to grow, ultimately impacting student performance and well-being.



The Connection Between Staffing and Success

The group most impacted by the pervasive staffing shortages in the education industry are students. When schools are consistently short on staffing, it negatively impacts student learning and welfare. This negative impact can be caused by various issues, including:

Larger class sizes: Staff shortages often lead to increased class sizes, which research shows can be particularly bad for students. The most famous study on class sizes, Tennessee's Project STAR, revealed that there was a strong correlation between student success and class size with students in smaller classes doing significantly better on academic tests^[23]. The study also noted that this difference in success persisted for years. Teachers also support the notion of needing smaller classes, as a Survey from Scholastic revealed that 9 in 10 teachers say smaller classes would help students^[24].

This can be attributed to overcrowded classrooms allowing less time for teachers to provide comprehensive support to each student and limiting the ability for instructional approaches like small group work, differentiated instruction, and hands-on learning.



Lower teacher quality: Current research shows that staffing shortages are forcing force schools to rely on less experienced or qualified teachers, which can negatively impact student achievement. According to updated 2023 data from a working paper published by the Annenberg Institute at Brown University found that across the U.S. there were at least 270,000 positions being held by underqualified teachers^[25]. This can be especially detrimental for student success as a 2019 report from the RAND Corporation revealed that when it comes to student performance on reading and math tests, teachers are estimated to have two to three times the effect of any other school factor, including services, facilities, and even leadership^[26].

Furthermore, research from the American Economic Association showed that students assigned to high-quality teachers are more likely to attend college and earn higher salaries, estimating that an increase in teacher quality could increase the expected lifetime income for a student by about \$250,000^[27]. This highlights how important it is for schools to provide high quality teachers who know how to help students succeed.

Reduced course offerings: Staffing-related reductions in course offerings can have longterm implications for student learning and success. The 2024 School Pulse Panel revealed only half of U.S. public schools offered academic assistance programs, and from that group, 37% reported that staffing issues limited their ability to offer programs^[28].

This can limit a student's opportunities to explore their interests and passions, potentially impacting their engagement and motivation in school. The loss of specialized programs, such as those focused on STEM or the arts, also can hinder the development of critical skills and knowledge.

Inadequate support services: Shortages that extend beyond teachers to include support staff such as counselors and nurses can also impact student learning. According to a 2022 Education Week report, when schools lack adequate staffing, students who need the most support suffer most because they have less access to specialized services^[29]. The report also reveals that students learn more when their teachers are less frequently absent, when the ratio of nurses to students is lower, and when teaching assistants are present, especially for students of color and students in high-poverty schools.

Psychological and emotional factors: Beyond the academic impact, staffing shortages also have psychological and emotional consequences for students. According to the 2024 School Pulse Panel, the majority of U.S. public schools cited insufficient mental health professional staff coverage as a factor limiting their ability to effectively provide mental health services. This is particularly troublesome as a 2023 Education Week report notes that 42% of high school students reported feeling sad or hopeless, which is a significant increase from the 26% recorded in 2009^[30].

The report also revealed that thoughts of suicide, attempts, and actual suicides among young people have also risen in that period.

A 2020 study from the National Institutes of Health pointed out the long-term impact of these challenges include poor academic performance^[31], while the Suicide Prevention Resource Center revealed it also causes lower grade point averages^[32], highlighting how vital school mental health resources are for student success.

The connection between staffing and student learning outcomes highlights the urgent need to address the current shortage crisis. When schools struggle to retain qualified teachers and support staff, students can be denied the opportunity to reach their full academic potential, perpetuating cycles of inequality and limiting their prospects.

By investing in strategies to attract, support, and retain high-quality educators, schools can work to ensure that every student has access to the resources and support they need to succeed.

Recommendations for Schools and Policymakers

To begin unwinding the staffing shortage crisis, school districts across the country will need to consider new hiring strategies or get creative in addressing the underlying factors contributing to shortages.

According to the Learning Policy Institute, these factors include inadequate compensation, lack of support, and challenging working conditions^[33].

Based on these factors, schools can consider the following recommendations to combat staffing shortages:

1 Improve teacher compensation

A 2022 report from the Learning Policy Institute suggests that offering more competitive salaries and benefits packages can help attract and retain high-quality educators. This may include providing additional compensation for teachers in high-need subjects or schools, as well as offering student loan forgiveness or housing assistance programs^[34].

2 Provide professional development opportunities

The Learning Policy Institute also points out that investing in ongoing training and support for teachers helps to foster growth and job satisfaction. The report suggests providing release time for teachers to collaborate with colleagues, offering mentorship programs for new teachers, and supporting teachers in pursuing advanced degrees or certifications, as methods of helping to improve the professional development opportunities available for your educators and staff^[35].

3 Reduce class sizes

Allocating resources to hire additional teachers and support staff can create more manageable class sizes and workloads, which in turn helps schools retain their educators. A study published in the Journal of Policy Analysis and Management found that smaller class sizes have been shown to improve student outcomes, particularly for disadvantaged students, and can also reduce teacher stress and burnout^[36].

Additionally, a 2021 study published in the Canadian Journal of Educational Administration and Policy found that teachers in smaller classes have higher morale^[37].

4 Foster supportive school environments

Schools can prioritize teacher autonomy, collaboration, and leadership opportunities to create positive working conditions. This can be done by providing teachers with greater flexibility in curriculum and instructional decisions, establishing professional learning communities, and involving teachers in school-wide decision-making processes.

5 Invest in teacher preparation programs

According to the Learning Policy Institute, providing funding and support for high-quality teacher preparation programs, particularly those that focus on recruiting and retaining diverse candidates, can also help mitigate shortages. This may include establishing partnerships between schools and universities, offering scholarships or stipends for teacher candidates, and providing clinical experience opportunities in high-need schools^[38].

6 Address systemic inequities

Schools should recognize and address the systemic inequities that contribute to staffing shortages. This may involve providing additional resources and support to high-need schools, addressing issues of bias and discrimination in the education system, and engaging in ongoing equity and diversity training for educators and administrators.

By implementing these recommendations, schools and policymakers can work towards creating a more sustainable and attractive teaching profession, ultimately addressing the root causes of staffing shortages. However, it is important to recognize that these efforts will require significant investment and long-term commitment from every education stakeholder.

While these strategies can be massively helpful, some school districts do not have the time or resources to effectively implement them. For these districts, partnering with educational staffing agencies may be a better solution to ease staffing shortages.

The Role of Educational Staffing Agencies in Addressing Shortages

Educational staffing agencies play a vital role in helping schools navigate shortages by providing staffing resources and solutions.

These agencies know how to leverage their expertise and candidate databases to fill your vacancies quickly and effectively, while also providing ongoing support to ensure that the needs of the school community are always being met. The benefits of partnering with a staffing agency to combat shortages include:

Flexibility: Staffing agencies can provide short-term or long-term placements, allowing schools to fill vacancies quickly and adapt to changing needs. A report from the Learning Policy Institute highlighted that this flexibility is particularly valuable during periods of unexpected staff turnover or extended absences and helps ensure that students continue to receive high-quality instruction without interruption^[39].



Expertise: Many staffing agencies have a network of specialized professionals, such as those who teach special education or STEM subjects, ensuring that schools have access to the specific candidates required to meet their unique needs. The National Center for Education Statistics has reported on the persistent shortages in these areas, emphasizing the importance of specialized recruitment^[40].

Reduced administrative burden: By handling the recruitment, screening, and onboarding processes, staffing agencies allow school administrators to focus on other critical tasks, such as instructional leadership and school improvement efforts. This support is particularly valuable for schools with limited human resources capacity or those facing multiple vacancies simultaneously.

Expanded candidate pool: Educational staffing agencies have a national reach, meaning your district's location doesn't limit the candidates you can consider bringing onboard. This can be particularly helpful for schools who are desperate for staffing or specialized help, especially those in high-need or rural areas. Reputable staffing agencies also prioritize diversity in their pool of professionals, which can help schools find educators from various backgrounds who better reflect the students they serve.

Support: Exemplary staffing agencies do more than just find you placements. They also offer comprehensive support and trainings to ensure that your professionals are receiving the proper guidance they need to meet your school's goals. This ongoing support also means that your staffing partner is always there to help your school face staffing setbacks confidently, without worrying about dedicating extra money and resources to each new challenge.

Due to these benefits and how they aid in relieving staffing shortage related pressures, the school staffing industry is growing. In fact, a Staffing Industry Analysts report from the March 2024 showed the education staffing industry is expected to see a \$2.2 billion revenue increase in 2024 and a \$2.4 billion increase in 2025^[41]. While educational staffing agencies can provide valuable support in addressing shortages, it is important to recognize that they are not a cure-all.

The Learning Policy Institute points out in a report that to build a sustainable and effective education workforce, it takes a holistic approach of investing in some of the long-term staffing strategies, in addition to working with an agency^[42].

By balancing this long-term investment in staffing and an agency partnership, school districts can ensure they are always receiving the support and highquality school-based professionals they require to meet their school's evolving staffing needs.

How Managed Service Providers Fit into the Picture

As schools grapple with these shortages, many are turning to Managed Service Providers (MSPs) for assistance.

MSPs are third-party companies that provide staffing solutions for their clients, through their expertise in recruiting, vetting, onboarding and managing contingent workers. MSPs can help schools with a variety of staffing services like finding the right candidates, handling onboarding and compliance, coordinating staffing from multiple vendors, and providing analytics to inform datadriven decisions. By handling these services, MSPs help organizations save time, money, and stress, allowing them to focus on the business functions that matter most to them.

Thanks to these functions and benefits, many organizations are either currently utilizing a MSP or are planning to seek one out in the near future. This is supported by data from Staffing Industry Analysts' 2024 Workforce Solutions Buyer Survey that reveals 55% of organizations already have a MSP in place, while 14% say they are likely to seriously explore one in the next two years^[43].

MSPs streamline staffing recruitment, hiring, and management through these functions:

- **Consolidated Invoicing:** MSPs provide a centralized billing process with customized rates and act as a single point of contact for all invoices and payments.
- Enhanced Analytics: MSPs enhance the ability to make data-driven staffing decisions by providing reporting and analytics through program managers and technology solutions, like a vendor management system (VMS).
- **Compliance Management:** MSPs ensure compliance for your school's contingent workforce by managing credentials and providing specialized expertise on labor laws, industry-specific regulations, and ever-evolving compliance standards.

- **Supplier Engagement:** MSPs are experienced in helping schools enhance supplier engagement by acting as intermediaries between your organization and its contingent workforce suppliers, streamlining the recruiting, hiring, and onboarding process.
- **Program Management:** MSPs offer comprehensive oversight from program managers with expertise in workforce planning, procurement, and vendor management, helping schools strategize and implement effective staffing solutions.
- Vendor Management System: MSPs offer clients Vendor Management Systems (VMS), which are software platforms that automate and streamline the process of procuring and managing contingent staff from multiple staffing vendors. In addition to simplifying staffing processes, a VMS allows schools to track key metrics like fill rates, time-to-fill, and costs across all vendors in real-time. This gives hiring managers full visibility into their staffing supply chain and the ability to identify top-performing vendors. Perhaps most importantly, VMS technology enables schools to rapidly scale up their temporary workforce to meet changing needs. As soon as absences or vacancies occur, substitute requests can be immediately pushed out to dozens of agencies to maximize fill rates. This agility is critical amid the unpredictability of school staffing demands.

Utilizing a MSP can offer the following advantages for schools seeking to optimize their workforce management, and gain a competitive edge.

- Cost Management: Working with MSPs can help schools manage their costs and save money. MSPs achieve this by negotiating competitive rates with staffing suppliers, standardizing processes to eliminate redundancies, and leveraging technology, like a VMS, to reduce administrative overhead. Moreover, MSPs can help identify cost-effective staffing solutions for specific projects, avoiding unnecessary long-term commitments.
- **Compliance:** MSPs specialize in navigating the complex landscape of labor laws and regulations. They ensure that all contingent workers are properly classified, adhere to legal requirements, and undergo necessary background checks. By meticulously managing compliance, MSPs mitigate the risk of costly legal disputes, fines, and reputation damage, providing peace of mind to schools.

- Time Saving: Time is a valuable resource, and MSPs can significantly reduce the time spent on various workforce management tasks. They handle the end-to-end process of recruiting, onboarding, and managing contingent workers, allowing internal teams to focus on providing students the best educational experience. This streamlined approach not only saves time, but also ensures a quicker response to staffing needs.
- Increased Flexibility: MSPs provide schools with the flexibility to scale their workforce up or down as needed. Whether it's responding to geographic demand fluctuations or project-specific requirements, MSPs have the resources and networks to quickly adapt to your changing needs. This flexibility ensures that schools can maintain an agile and responsive workforce.
- Improved Quality: Working with MSPs often gives schools access to a broader and more diverse pool of talent than trying to find contingent workers on their own. This allows schools to quickly identify and secure top-quality candidates with the skills and expertise required for their specific needs. By consistently delivering high-quality talent, MSPs enhance the overall performance and output of an organization, contributing to better project outcomes and business success.

In summary, partnering with an MSP that offers a robust VMS platform can be a game-changer for schools facing severe understaffing. This strategy enables schools to focus on their core educational mission while ensuring classrooms remain fully staffed with qualified professionals.



Conclusion

The staffing shortage crisis in education presents significant challenges for schools, students, and communities. Understanding the impact of shortages on student learning outcomes and school performance, as well as the factors contributing to this crisis, is crucial for designing effective solutions. Educational staffing agencies can serve as valuable partners in addressing immediate needs by providing access to qualified and diverse candidates and offering ongoing support and expertise. However, long-term strategies, such as improving teacher compensation and working conditions, are also essential for creating a sustainable education workforce. Addressing the staffing shortage crisis will require a collaborative and comprehensive effort from all education stakeholders.

Investing in the recruitment, retention, and support of high-quality educators, whether through long-term initiatives or by working with a staffing agency, can be crucial for the well-being and success of students, and for the future of the entire education system. By ensuring that every student, regardless of their background or circumstances, has access to the educational opportunities they need to thrive, we can build a stronger, more equitable, and more sustainable education system.

Navigating this challenging landscape requires a sense of urgency, collaboration, and innovation. By working together to develop creative solutions and advocate for the necessary resources and policies, we can overcome the staffing shortage crisis, create an education system that supports the success of all students and educators, and build a brighter future for communities.

References

- 1, 22, 28 National Center for Education Statistics. (2024, April). School Pulse Panel: Responses to the Pandemic and Efforts Toward Recovery. School Pulse Panel - Interactive Results. nces.ed.gov/surveys/spp/results.asp
- 2 De La Rosa, J., & Robelen, E. (2023, December 13). Eight Percent of Public School Teachers Left Teaching in 2021, a Rate Unchanged Since Last Measured in 2012. Press Release - Eight Percent of Public School Teachers Left Teaching in 2021, a Rate Unchanged Since Last Measured in 2012 - December 13, 2023. nces.ed.gov/whatsnew/press_releases/12_13_2023.asp
- 3 Ronfeldt, M., Loeb, S., & Wyckoff, J. (2012, October 12). How Teacher Turnover Harms Student Achievement. Center for Education Policy Analysis. cepa.stanford.edu/sites/default/files/4.full_.pdf
- 4 Marken, S., & Agrawal, S. (2022, June 13). K-12 Workers Have Highest Burnout Rate in U.S. Gallup. news.gallup.com/ poll/393500/workers-highest-burnout-rate.aspx
- 5 Kurtz, H. (2023, May 15). Is Teacher Morale on the Rise? Results of the Second Annual Merrimack College Teacher Survey. EdWeek Research Center. www.edweek.org/research-center/reports/is-teacher-morale-on-the-rise-results-of-thesecond-annual-merrimack-college-teacher-survey/2023/05
- 6 Jotkoff, E. (2022, February 1). NEA Survey: Massive Staff Shortages in Schools Leading to Educator Burnout; Alarming Number of Educators Indicating They Plan to Leave Profession. National Education Association. www.nea.org/about-nea/media-center/press-releases/nea-survey-massive-staff-shortages-schools-leading-educator-burnout-alarming-number-educators
- 7 National Education Association. (2024, April 18). Educator Pay Data 2024. National Education Association. www.nea.org/ resource-library/educator-pay-and-student-spending-how-does-your-state-rank
- 8 Allegretto, S. (2023, September 29). Teacher Pay Penalty Still Looms Large: Trends in Teacher Wages and Compensation Through 2022. Economic Policy Institute. www.epi.org/publication/teacher-pay-in-2022/
- 9, 14 Taie, S., Lewis, L., & Merlin, J. (2023, December). Teacher Attrition and Mobility. National Center for Education Statistics. nces.ed.gov/pubs2024/2024039M.pdf
- 10 Lin, L., Parker, K., & Menasce Horowitz, J. (2024a, April 4). Teachers' Job Satisfaction. Pew Research Center. www. pewresearch.org/social-trends/2024/04/04/teachers-job-satisfaction/
- 11 Schwartz, S. (2023, July 26). Teacher Professional Development, Explained. Education Week. www.edweek.org/leadership/ teacher-professional-development-explained/2023/07
- 12 Gray, L., Taie, S., & O'Rear, I. (2015, April). Public School Teacher Attrition and Mobility in the First Five Years. Institute of Education Sciences. nces.ed.gov/pubs2015/2015337.pdf
- 13, 16 Educators for Excellence. (2024). Voices from the Classroom 2024: A Survey of America's Educators. Educators for Excellence. e4e.org/wp-content/uploads/2024/05/2024-Voices-from-the-Classroom-Report.pdf
- 15 Litvinov, A. (2023, August 31). Why Are Educators Still Buying Their Own School Supplies?. National Education Association. www.nea.org/nea-today/all-news-articles/why-are-educators-still-buying-their-own-school-supplies
- 17 Kohli, R. (2018). Behind School Doors: The Impact of Hostile Racial Climates on Urban Teachers of Color. Urban Education. journals.sagepub.com/doi/10.1177/0042085916636653
- 18 Doan, S., Steiner, E. D., Pandey, R., & Woo, A. (2023, June 21). Teacher Well-Being and Intentions to Leave. RAND. www.rand. org/pubs/research_reports/RRA1108-8.html
- 19 Will, M. (2023, August 28). What Teacher-Preparation Enrollment Looks Like, in Charts. Education Week. www.edweek.org/ leadership/what-teacher-preparation-enrollment-looks-like-in-charts

20 Lin, L., Parker, K., & Horowitz, J. M. (2024b, April 4). What's It Like To Be a Teacher in America Today?. Pew Research Center. www.pewresearch.org/education/2024/04/04/what-s-it-like-to-be-a-teacher-in-america-today/

21. American School Counselor Association. (2024). School Counselor Roles & Ratios. American School Counselor Association. www.schoolcounselor.org/school-counseling/school-counselor-roles-ratios

- 23 Mosteller, F. (1995). The Tennessee Study of Class Size in the Early School Grades. The Future of Children, 5(2), 113-127. edsource.org/wp-content/uploads/old/STAR.pdf
- 24 Scholastic. (2012). America's Teachers on the Teaching Profession. Scholastic/ The Bill & Melinda Gates Foundation. www. scholastic.com/primarysources/pdfs/Gates2012_full.pdf
- 25 Nguyen, Tuan D., Lam, Chanh B., & Bruno, Paul. (2022). Is There a National Teacher Shortage? A Systematic Examination of Reports of Teacher Shortages in the United States. Annenberg Institute at Brown University. edworkingpapers.com/ai22-631
- 26 Opper, I. M. (2019, December 4). Teachers Matter: Understanding Teachers' Impact on Student Achievement. RAND. www. rand.org/pubs/research_reports/RR4312.html
- 27 Chetty, R., Friedman, J. N., & Rockoff, J. E. (2014). Measuring The Impacts of Teachers II: Teacher Value-Added and Student Outcomes in Adulthood. American Economic Review, 104(9), 2633-2679. www.aeaweb.org/articles?id=10.1257/ aer.104.9.2633
- 29 Lieberman, M. (2022, June 15). How School Staffing Shortages Are Hurting Students. Education Week. www.edweek.org/ leadership/whos-at-risk-when-schools-staffing-shortages-persist/2022/06
- 30 Stone, M. (2023, October 16). Why America Has a Youth Mental Health Crisis, and How Schools Can Help. Education Week. www.edweek.org/leadership/why-america-has-a-youth-mental-health-crisis-and-how-schools-can-help/2023/10
- 31 Agnafors, S., Barmark, M., & Sydsjö, G. (2021). Mental Health and Academic Performance: A Study on Selection and Causation Effects from Childhood to Early Adulthood. Social Psychiatry and Psychiatric Epidemiology, 56(5), 857–866. www.ncbi.nlm.nih.gov/pmc/articles/PMC8068628/
- 32 Suicide Prevention Resource Center. (2020). Consequences of Student Mental Health Issues. Suicide Prevention Resource Center. sprc.org/settings/colleges-and-universities/consequences-of-student-mental-health-issues/
- 33, 34, 35, 38, 39, 42 Carver-Thomas, D., Leung, M., & Burns, D. (2022). Teacher Shortages During the Pandemic: How California Districts Are Responding. Learning Policy Institute. learningpolicyinstitute.org/product/californiateacher-shortages-response-report
- 36 Krueger, A. B. (2003). Economic Considerations and Class Size. The Economic Journal, 113(485), F34-F63. onlinelibrary.wiley. com/doi/abs/10.1111/1468-0297.00098
- 37 Laitsch, D., Nguyen, H., & Younghusband, C. (2021). Class Size and Teacher Work: Research Provided to the BCTF in their Struggle to Negotiate Teacher Working Conditions. Canadian Journal of Educational Administration and Policy. files.eric. ed.gov/fulltext/EJ1301589.pdf
- 40 National Center for Education Statistics (NCES). (2022). Characteristics of Public School Teachers. U.S. Department of Education, Institute of Education Sciences. nces.ed.gov/programs/coe/indicator/clr
- 41 Doherty, E., Fullilove, C., Horvat, A., Landhuis, T., Schultz, M., & Starkey, C. (2024, March 26). US Staffing Industry Forecast: March 2024 Update. Staffing Industry Analysts. www2.staffingindustry.com/site_member/Research/Research-Reports/ Americas/US-Staffing-Industry-Forecast-March-2024-Update
- 43 Starkey, C. (2024, April 23). Workforce Solutions Buyer Survey: 2024 Americas Results. Staffing Industry Analysts. www2. staffingindustry.com/site_member/Research/Research-Reports/Americas/Workforce-Solutions-Buyer-Survey-2024-Americas-Results



