National Council on Teacher Quality

Reimagining the Teaching Role Research Summary

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Produced in conjunction with NCTQ's *Reimagining the Teaching Role report.*

A growing body of evidence suggests that students are not receiving the necessary support to succeed academically. Across the United States, the impacts of the COVID-19 pandemic have led to significant declines in student achievement. In fact, as of the 2023–24 school year, the average student would need 4.8 and 4.3 months of additional schooling in reading and math, respectively, to meet pre-pandemic achievement levels. Eighth-graders would essentially need an entire additional school year to catch up, and the percentage of students failing to meet basic benchmarks climbs even higher for students of color and students from low socioeconomic backgrounds.[1]

While most states have seen some recovery in student learning,[2] there is still urgency to better support students and meet their academic needs. And with teachers positioned as the most important in-school factor impacting student achievement,[3] it is vital that highly effective teachers remain in the classroom and high-capacity candidates enter the profession if we are to improve student outcomes.

For years, recruiting and retaining a strong teacher workforce has been a challenge, and national surveys indicate that the issue is likely to persist. A 2024 national survey revealed that only 16% of teachers would recommend the profession to others,[4] while another national survey revealed that only one in five teachers is "very satisfied" with their career.[5] Job dissatisfaction is the leading cause of teachers choosing to leave, and it has been gradually increasing for decades.[6]

Teachers' working conditions (that is, their perception and happiness with the environment in which they work) are linked to their overall satisfaction with the job, and ultimately their decision to stay or leave the profession. To keep the most effective teachers, we need to strengthen and foster positive working conditions. We can do so through potential strategies like more collaborative roles, better instructional materials, and stronger professional supports—all of which have been shown to lead to more satisfied teachers.[7]

This context opens the door for emerging conversations about reimagining instruction in schools, redefining teaching roles, and exploring how states develop, strengthen, and support their educator pipelines to improve student outcomes.

Often used interchangeably with terms like "strategic staffing" or "strategic school staffing," reimagining the teaching role involves disrupting traditional approaches to teaching. It encourages innovative solutions, like teacher teams to manage the instruction of larger classrooms, flexible scheduling, and new roles for teachers that allow them to advance in their careers while staying in the classroom, thus making the profession more sustainable—and ultimately leading to improved student outcomes.

Research shows that teachers improve as they stay in the classroom longer,[8] and high rates of teacher turnover are bad for student outcomes.[9] Therefore, a more experienced workforce is likely to be a more effective one.

This research summary examines the research behind key components of strategic staffing models, such as formalized teacher leadership and mentorship, differentiated compensation, teacher working conditions, teacher collaboration, and class size adjustments. It also highlights early evaluation data of several of the models themselves.

Although research provides compelling evidence supporting each of the components of strategic staffing models described below, none of the cited studies can make causal claims. Therefore, they only identify correlations between these strategic staffing features and various outcomes.

Teacher Leadership

Often, reimagining the teaching role involves providing opportunities for teachers to take on more leadership responsibilities through coaching and leading teams of other teachers. Although formal teacher leadership programs (which typically involve teachers collaborating with their peers to enhance instruction) have become more popular, research is limited on their effectiveness.[10] Nevertheless, several studies point to promising results, finding improved outcomes for teachers and students.

A 2017 analysis of nearly 25,000 schools found that, even when controlling for background characteristics, schools with higher levels of teacher leadership had significantly higher student achievement, with improved student outcomes in both math and English language arts (ELA). The study examined eight measures of teacher leadership, including whether teachers have a role in devising teaching techniques, setting grading and assessment practices, and selecting instructional materials, and it found that schools with the most robust levels of teacher leadership on average ranked at the 56th percentile in math and ELA, while schools with the lowest levels of teacher leadership performed at the 45th percentile.[11]

Data from New York City's Teacher Career Pathways program, which gives teachers opportunities to coach and provide professional development to their colleagues, reinforces these findings. Students in schools staffed with a teacher leader participating in the program for at least two years saw increased achievement gains, with the number of students achieving proficiency in ELA and math increasing by 9.3% and 6.5%, respectively. Teacher leaders were also twice as likely to be retained at their schools for two years than similar teachers, and teachers working alongside two or more teacher leaders were nearly 25% more likely to be retained at their school the following year.[12]

A meta-analysis of 21 studies exploring seven dimensions of teacher leadership and their impact on student outcomes further supports existing research. The dimensions (which include aspects of teacher leadership such as facilitating improvements in curriculum, instruction, and assessment; promoting teachers' professional development; and fostering a collaborative culture in school) were found to have a small, positive relationship with student achievement, with slightly stronger impacts in math than reading. The meta-analysis also found similar relationships between teacher leadership and student achievement in both elementary and secondary schools.[13]

Mentoring

In addition to serving as teacher leaders, many approaches to reimagining the teaching role include experienced, highly effective teachers mentoring and coaching novice teachers.[14] Most research has shown significant benefits and improved outcomes for teachers and students when new teachers have access to a mentor or other induction strategies.[15] Importantly, teacher leaders undertake this mentorship role as part of their core responsibilities, not as extra responsibility for extra pay.

A review of 15 empirical studies revealed that generally students taught by teachers who went through some type of induction or mentoring program performed better on academic achievement tests.[16] Furthermore, an evaluation of over 400 elementary schools in 2004 found that strong induction programs with well-trained mentors and opportunities to learn from experienced teachers can lead to higher student achievement. Students taught by teachers in these programs scored 4 percentile points higher in reading and 8 percentile points higher in math after three years than students taught by teachers with less comprehensive mentoring.[17] It should be noted however that student impacts were only seen from teachers who had received two years of comprehensive mentoring, and not until the third year.

Improvements in student outcomes, as well as benefits to a teacher's instructional practice, are not the only positive outcomes of these programs. In fact, novice teachers who are mentored by more experienced, effective educators generally experience higher retention rates.[18] A long-term analysis found that 86% of teachers assigned a mentor in their first year were still teaching after five years, compared to just 71% of teachers who did not have a mentor.[19]

Differentiated Compensation

Several popular approaches to reimagine the teaching role center around compensating certain teachers more for taking on additional responsibilities, teaching more students, or working in certain subject areas or schools.[20] Although there is a robust research base examining the impact of paying teachers more for working in high-need subjects and

schools, limited research exists examining the relationship between increased compensation for teacher leader roles and outcomes like student performance or educator recruitment and retention. Nevertheless, it can be helpful to highlight the relationship between differentiated pay structures and teacher retention more generally.

Research has consistently shown that differentiated compensation models can be effective for recruiting and retaining teachers, if implemented properly. These strategies are typically implemented with targeted goals in mind, such as increasing students' access to highly effective teachers, attracting new people to the profession, or motivating teachers to work in hard-to-staff subjects or schools.

An analysis of a teacher incentive policy in Washington state, which awarded $5,000 financial bonuses to National Board–certified teachers working in high-need schools, found that it led to hiring more board-certified teachers in those schools, as well as higher board-certification rates of incumbent teachers and reduced turnover. The incentive also increased the number of board-certified teachers in participating schools by roughly 4–8 percentage points, highlighting that such incentives can increase student access to highly effective teachers.[21]

The District of Columbia Public Schools' IMPACT evaluation program, which provides bonuses and potentially quicker movement through the district's salary schedule to teachers rated highly effective (with bonuses up to $25,000 for highly effective teachers working in hard-to-staff schools and subjects), has helped the district retain 92% of its highly effective teachers as of 2018. Furthermore, since the program's implementation, low-performing teachers are three times more likely than high-performing teachers to leave the district,[22] providing further evidence that such strategies can be effective for retaining highly effective teachers.

Differentiated compensation programs have also been shown to be a helpful tool for filling hard-to-staff subjects. Hawaii implemented $10,000 annual bonuses for special education teachers, reducing the total number of vacant special education teaching positions or those filled by an unlicensed teacher by 35 percent. While this policy did not lead to any significant changes in special education teacher retention, most of the vacancies were filled by general education teachers who moved into special education roles, highlighting that differentiated compensation can serve as a powerful tool for influencing educator behavior.[23]

A differentiated compensation program in Georgia allows secondary math and science teachers to start on step six of the state's salary schedule, meaning those teachers receive an additional $21,000 over the course of their first six years compared to a teacher beginning on step one. An analysis of the program found that it reduced attrition

rates by as much as 28% in the first few years and kept attrition lower than it would have been after those first six years, even without the higher salary.[24]

Certain differentiated incentive structures can also be valuable tools for increasing the diversity of the educator workforce. Research has noted a positive correlation between the diversity of a district's workforce and whether they offer specific incentives. Bonuses for excellent teachers, as well as bonuses for working in hard-to-staff schools, have both been associated with 2–4 percentage point increases in a school's teacher racial diversity.[25]

Differentiated pay for performance has also been linked to improved student outcomes. In addition to experiencing higher test scores, students taught by teachers who were paid more for having stronger student test scores and classroom observations were more likely to graduate on time, less likely to get involved in the criminal justice system, and more economically self-sufficient than students in comparable schools.[26] A separate study of 10 districts participating in the Teacher Incentive Fund, a federal program that provides performance pay to teachers and principals in high-need schools, found that pay-for-performance increased student achievement in math and reading by roughly 3–4 weeks of learning.[27]

While research indicates that differentiated compensation can positively impact both teachers and students, a 2024 national survey suggests teachers are relatively indifferent to its potential as a retention tool. Only 12% of respondents expressed belief that increased pay for working in understaffed schools or subjects would likely keep them in the profession. Similarly, just 8% viewed expanded leadership opportunities with higher salaries as a strong retention factor. However, these perspectives varied by race, with 14% and 18% of teachers of color, respectively, supporting these strategies for retention.[28]

Teachers were more optimistic about differentiated compensation as a recruitment tool, particularly as a means to create a more diverse workforce: 21% of all teachers, and 28% of teachers of color, indicated that higher pay for difficult-to-staff positions would likely attract diverse candidates. Increased leadership opportunities accompanied by salary enhancements were also seen as an attractive strategy by 9% of teachers overall and 16% of teachers of color.[29]

Teacher Working Conditions

A major goal of most, if not all, strategic staffing initiatives is to improve the working conditions of teachers, particularly as they are intricately related to learning conditions for students. However, there is limited research examining the impact of strategic staffing models on the overall working conditions of teachers.

A large-scale analysis of a Massachusetts survey of school working conditions, combined with demographic and student achievement data, explored three outcomes: teacher satisfaction, teacher career intentions, and student achievement growth. The analysis revealed that teachers are more satisfied and more likely to be retained in schools that have positive work environments, regardless of a school's student demographics. Certain components of the work environment were most likely to predict a teacher's overall job satisfaction and career plans: a school's overall culture, principal leadership, and relationships between colleagues. Favorable conditions for teachers were also shown to predict higher rates of student growth.[30]

Collaboration Time for Teachers

Many teachers working in strategic staffing models are asked to regularly work alongside and collaborate with other teachers either as coaches or teammates. Research has generally shown that both teachers and students benefit from working in or attending schools where instructional collaboration is taking place, although most research stops short of claiming a direct causal relationship between collaboration and better outcomes.[31]

A 2023 analysis of district contracts in NCTQ's Teacher Contract Database revealed that, on average, elementary teachers in our sample had roughly 47 minutes a day for independent planning time, which could be leveraged to collaborate with peers.[32] More than half of districts in our sample do not address collaboration time at all. Of those that do lay out specific guidance, collaboration time varies significantly: from a half-day a year to a minimum of an hour a week.[33]

An earlier (2009) analysis of K–12 public school teachers highlighted that, while most teachers reported collaborating with their fellow teachers, their experiences varied widely, from less than 30 minutes per week (12%) to more than three hours per week (24%). Teachers also reported different types of opportunities to collaborate, with 75% of teachers reporting they collaborated with other educators to discuss ways to improve student outcomes, but only 22% indicating they observed colleagues to provide feedback.[34]

A 2007 survey analysis of over 450 teachers and 2,500 elementary school students found that more frequent teacher collaboration on processes like selecting instructional materials, evaluating curriculum, and determining professional development needs was a statistically significant predictor of a school's math and reading achievement, even when controlling for student and school characteristics.[35]

An analysis derived from survey and administrative data on over 9,000 teachers in Florida found that collaboration time was positively associated with higher student achievement: teachers and schools engaging in higher-quality collaboration also experienced stronger student gains in math and reading (although researchers noted that their study design limited their ability to draw causal conclusions between the two). The same study also found that teachers improve in their roles faster when working in schools with higher levels of collaboration.[36]

The University of Chicago's Consortium on School Research also found that a school's "professional capacity" positively impacts student outcomes. In the study, "professional capacity" included factors like a school's quality of professional development, norms of continuous improvement, and "professional community," which includes how often and to what extent teachers have opportunities to collaborate. The researchers' extensive longitudinal analysis (which leveraged student and teacher surveys, student outcome data, in-depth case studies, administrative records, and more) found that schools with a strong sense of professional community were about four times more likely to see large gains in student reading and math outcomes than schools with a weak sense of professional community. Even more schools showed gains when a strong professional community was paired with a strong, standards-aligned curriculum within and across grades.[37,38]

It can also be challenging to isolate collaboration's impact on teacher recruitment, retention, and overall job satisfaction, particularly since schools will typically implement a variety of practices to improve working conditions. As such, many researchers investigating the impacts of collaboration on teacher outcomes view it as part of a larger swath of strategies that can positively impact teacher perceptions about their roles. Perhaps the largest meta-analysis on teacher collaboration, which reviewed 82 studies globally, found that teachers working in collaborative environments experienced decreased workload, higher morale, greater efficacy, increased communication, and reduced personal isolation, leading them to "profit most" from collaboration.[39]

Collegiality (or work environments where colleagues are encouraged to collaborate and work and learn alongside one another) has been shown by several studies to make teachers feel more committed to their organization and their profession as a whole. Collegial cultures also positively influence teachers' motivation and career commitment, as well as how willing they are to modify their practices in the classroom.[40] A separate study in Massachusetts further emphasizes these findings, noting that teachers working in schools with "favorable work environments," which include collegial, productive working relationships among teachers, are less likely to leave their jobs. The impact a teacher's working environment has on these perceptions is nearly double that of other factors, such as a school's resources or facilities.[41]

Class Size

Several strategic staffing approaches require larger class sizes, with some models bringing together more than 100 students in a classroom (supported by multiple educators). Significant research has been conducted examining the impact of classroom size on student achievement. The Tennessee Student Teacher Achievement Ratio, or STAR study, conducted in the 1980s, has long served as a landmark investigation into class size. The STAR study found that small classes of 15–17 students in kindergarten through third grade led to improved achievement, reduced grade retention, and generally higher student engagement. Even higher outcomes were seen for males, socioeconomically disadvantaged students, and other historically marginalized groups. The study also found long-term benefits, such as improved graduation rates and students choosing to take more rigorous coursework in high school.[42]

Since then, class size researchers have taken on a more nuanced view, suggesting that smaller class sizes require substantial tradeoffs that may not result in overall benefits. In 1996, California passed a class size reduction program that provided financial incentives to districts that reduced their overall class sizes. Researchers examining the impact of the initiative found a negligible benefit on student achievement and that restrictions actually resulted in a larger number of teacher shortages, as districts struggled to meet the demand for more educators. This eventually led to districts hiring less-qualified staff: educators without full credentials, primarily in low-income schools serving historically underrepresented students.[43] Research has shown that students achieve stronger academic results when taught by fully certified teachers than uncertified teachers.[44]

The most promising interventions in reducing class size are targeted and benefit certain student populations, including early childhood, low-income students, and students of color. Black student participants in one study experienced nearly double the positive outcomes in terms of test score and postsecondary degree attainment when placed in small classes than their peers.[45] A separate study found that Black students' academic growth through class size reduction significantly closed achievement gaps.[46]

Seeing results from class size adjustments may require significant reductions in the number of students in a class, limiting their feasibility. While students in small K–3 classrooms outperformed their peers in reading after four years, class sizes needed to be reduced to 15 or fewer students before benefits were observed.[47]

Given this limitation, research demonstrates that "right-sizing" classrooms may be a viable and cost-effective intervention to reap the benefits of reduced class sizes without diluting teacher quality. A simulation study based on North Carolina data suggests that assigning more students to highly effective teachers' classrooms, and compensating those teachers accordingly, improves academic performance for all students, as it

increases students' access to effective teachers while decreasing class loads for other teachers. This strategy may be especially beneficial for novice educators who may be more effective with smaller classes.[48]

Outcomes from Select Strategic Staffing Models

Formalized strategic staffing models are still relatively new, which limits the amount of research conducted on their effectiveness, particularly by third parties. Furthermore, the existence of several strategic staffing models with differing approaches, many of which are designed to be adaptable to the unique needs of districts and schools, further complicates researchers' ability to study these models collectively.

Below, we highlight the emerging research from several popular (in terms of usage and implementation) models that districts nationwide are implementing. Notably, much of the research into the efficacy of these strategies comes from the organizations or institutions that created them, and should therefore be interpreted cautiously until independent third parties conduct further evaluation.

Opportunity Culture

The Opportunity Culture model, developed by Public Impact, is designed so that schools and districts can adjust it to their unique needs. The model is primarily structured around "multi-classroom leaders (MCLs)," highly effective teachers who support teams of other teachers and support staff with lesson planning, data analysis, instructional support, and tutoring support. In most cases, MCLs continue to teach while observing, coaching, and providing feedback to other teachers on their team. As of 2023, Public Impact notes that more than 800 schools have implemented or committed to implementing the model, overwhelmingly in Title I schools.[49]

An early evaluation of three pilot school districts (encompassing more than 15,000 students) found that students experienced statistically significant gains in math. Researchers also noted that while students taught by team teachers saw positive gains in reading, the model failed to produce any statistically significant impacts when school-by-year fixed effects were included in the analysis to account for overall improvement in the treated schools.[50]

A 2021 evaluation of a large Texas district using the Opportunity Culture model found positive, immediate academic gains for students exposed to multi-classroom and team teachers. Students taught by a multi-classroom leader or team teacher performed roughly 0.07 standard deviations stronger in math and 0.20 standard deviations stronger in reading compared to students who did not have an Opportunity Culture teacher, with even larger benefits for English language learners and at-risk students.[51] When converted

to additional years of learning, this student impact equates to roughly an extra 0.8 years of learning in reading and 0.3 years in math. A subsequent 2024 analysis from the same district further reinforces earlier findings, with students taught by "team reach" teachers (teachers working under the direction of a multi-classroom leader) experiencing stronger achievement in both reading and math, with larger gains for English language learners.[52]

Surveys of teachers working in Opportunity Culture model schools also highlight that teachers generally perceive the model as being beneficial. A 2023 survey conducted by Public Impact (the creators of the model), which included roughly 1,600 teachers and staff working in Opportunity Culture Schools, found that 87% of all staff (and 97% of multi-classroom leaders) wanted Opportunity Culture to continue in their schools. The survey also found that an overwhelming majority of teachers and staff in these schools agreed or strongly agreed that the initiative improved student learning, provided excellent teachers with the opportunity to lead their peers, improved the effectiveness of teachers, had a positive impact on staff collaboration, and had a positive impact on their school's culture.[53]

Next Education Workforce

Arizona State University's flexible, school-specific model, Next Education Workforce, positions a "core team" of educators who provide instruction to and share responsibility for a large, 50–150 student roster. An "extended team" can then be leveraged to provide additional support to teachers while working across teams or schools. The Next Education Workforce model differentiates responsibility based upon each educator's unique skill set. For instance, one teacher may be responsible for planning and teaching mathematics while another is responsible for science instruction. An extended team member may be brought in to provide tutoring support or to teach an elective. The core team of educators, typically under the direction of a lead teacher, uses data to group students and provide instruction and interventions in a flexible learning environment where one portion of the class may be learning social studies while another is receiving a literacy intervention.

In Mesa Public School District (AZ), students taught by Next Education workforce teams experienced 1.4 more months of reading growth than students in traditional models. Students in Next Education Workforce classrooms also passed Algebra 1 at higher rates (79%) than traditionally taught students (75%).[54]

A 2022 survey of over 1,400 teachers found that teachers working on Next Education Workforce teams were more satisfied with their jobs, reported better interactions with their students, and collaborated more than teachers working in more traditionally structured schools.[55]

A 2024 analysis from the Center for Reinventing Public Education (CRPE) found improved educator outcomes for teachers serving on teams when compared to non-teamed teachers. Teachers working under the Next Education Workforce model were more likely to say they still planned to be teaching in five years, were more likely to say they would recommend teaching to a friend, and had higher evaluation ratings, even when controlling for ratings from previous years. Although the difference was not statistically significant, teachers serving on teams under the Next Education Workforce model were also more likely to be teaching in the same school the following year, with early-career teachers experiencing the largest retention rate as compared to similar, non-teamed teachers.[56] A follow-up analysis of CRPE's report, which adds an additional year of teacher turnover data, found that Next Education Workforce teachers have significantly lower turnover rates than non–Next Education Workforce teachers, at 11.6% and 23.2% respectively.[57]

US Prep

The University of School Partnerships for the Renewal of Educator Preparation (US PREP) strategic staffing model aims to combat district staffing challenges by working directly with educator preparation programs to fund teacher resident stipends to address candidates' financial needs and strategically place student teachers to address schools' instructional needs.

The model is based on an approach that originated at Texas Tech University, Tech Teach. Through the Tech Teach program, candidates are prepared for the profession through a yearlong paid teacher residency in their final year. Clinical practice experiences under the Tech Teach model are tailored to individual school and candidate needs, meaning they can look different from school to school. Tech Teach, and by extension US PREP, offers several models for effectively leveraging candidates, such as using them as long-term substitutes and tutors, or even increasing class sizes and having candidates teach alongside their mentor teacher. In practice, this may look like leading a classroom one day a week as a substitute teacher, while spending the other days student-teaching under a mentor teacher.

A 2022 analysis of the Tech Teach model, now leveraged by US PREP nationally, found that students prepared by Tech Teach educators saw stronger math performance than students taught by teachers from other pathways. Students taught by educators trained in the statewide version of the program, Tech Teach Across Texas, experienced stronger reading scores than other students. Educators who went through either program also saw greater gains in their students' achievement by their third year of teaching, meaning that they become more effective, at a faster rate, than teachers from other pathways. Furthermore, students of color, socioeconomically disadvantaged students, students with disabilities, and English language learners all experienced stronger math gains than similar students of teachers from other pathways.[58]

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