

State Policy Levers to Address Teacher Shortages

Tiffany McDole and Cassidy Francies

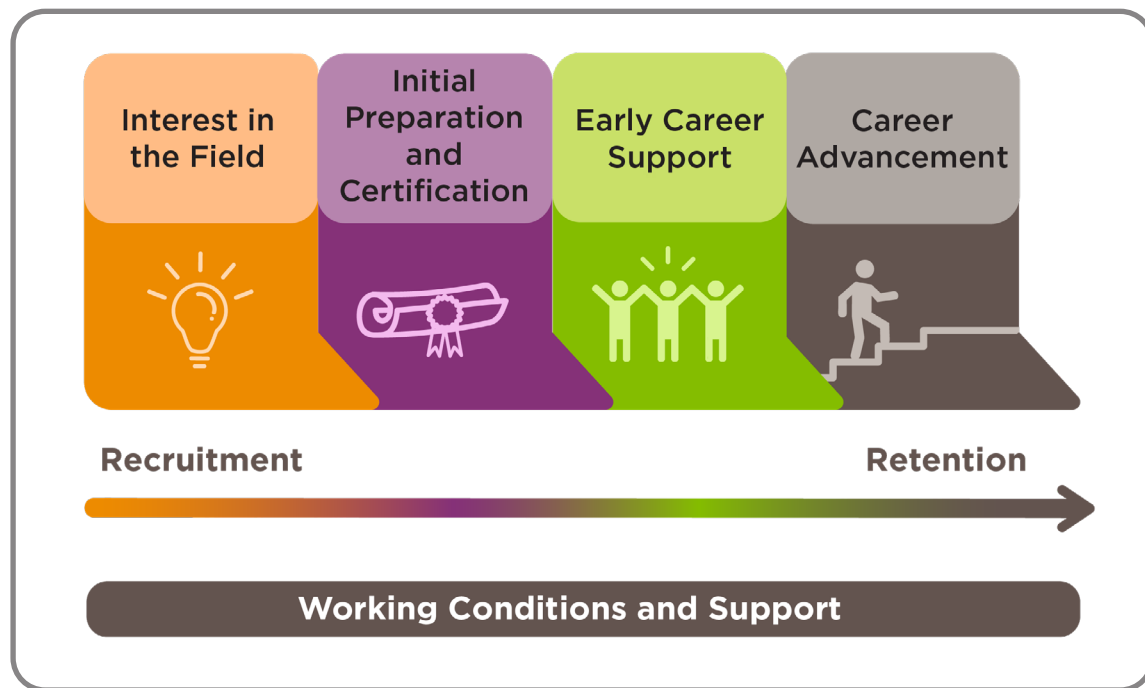
Specific and persistent [teacher shortages](#) continue to be a challenge for state policymakers. While national media coverage paints a picture of widespread shortages, a closer examination reveals that shortages tend to be concentrated in certain subjects, such as upper-level math and special education, and in certain schools, including historically under-resourced schools and rural schools. Moreover, the [demographic makeup](#) of classroom teachers does not reflect our nation's increasingly diverse student population, resulting in a shortage of teachers of color, who have been [shown](#) to boost student well-being and achievement.

Teacher shortages have profound consequences for students, schools and districts. School climate and instructional quality [often suffer](#) when teachers leave. Specifically, [inadequate staffing](#) and [frequent teacher turnover](#) are more likely to impact schools that serve students in rural and urban areas, linguistically diverse students, students identified for special education and students of color. The lack of quality candidates to fill vacancies means these student populations are more likely [to be taught](#) by novice teachers and teachers without full certification. The shortage of quality teachers is also financially costly for school districts. The estimated costs for a school district to recruit a new teacher for a vacancy ranges between [\\$10,000 to \\$20,000](#).

“Given that shortages are most pronounced in specific settings, recruiting and retaining teachers is less about teachers generally and more about finding and keeping the right teachers, in the right subjects, for the right schools.”

Frequently, the primary policy response to shortages is to recruit more teachers, but research demonstrates a need to balance recruitment with retention using a strategic, specific and comprehensive approach. Most teaching vacancies are driven by high turnover in the profession, rather than by teacher retirement or growth in student populations. Policy solutions in recent decades have struggled to break the constant cycle of teacher recruitment and high turnover, which contributes to the persistence of shortages in the field. Given that shortages are most pronounced in specific settings, recruiting and retaining teachers is less about teachers generally and more about finding and keeping the right teachers, in the right subjects, for the right schools.

Teacher Pipeline



Teacher Shortages Landscape

Policymakers interested in strengthening the teacher workforce may benefit from understanding the forces that contribute to teacher shortages and the nuances in how these shortages play out in schools and communities. While there are gaps in data regarding the teacher pipeline, several high-level observations may assist policymakers in shaping effective interventions.

The teacher labor market varies across and within states. Teacher labor markets tend to be hyperlocal, as teachers are more likely than similar professionals to work close to the communities where they were raised. In addition, in-state

teacher licensure requirements and the ease or difficulty of transferring licensing credentials between states, for instance, can affect a state's ability to attract or retain teachers. The variation in labor markets illuminates the need for robust data systems that help policymakers understand shortages at the local level.

Shortages tend to be concentrated in specific subject areas. According to [federal reporting](#), most states consistently identify math, special education, science and world language courses as critical shortage areas. In recent years, many states have also identified bilingual and English language-acquisition teachers as a critical shortage area. In contrast, [few states](#) report shortages in elementary education, English or social studies, though some schools within states may struggle to fill these positions.

Shortages tend to be concentrated in specific schools and communities. Rural schools, which make up nearly [a third](#) of all U.S. schools, often [struggle to attract](#) a sufficient and high-quality teaching workforce. Many urban schools also report [consistent shortages](#) because of challenges in keeping pace with the salaries of neighboring suburban districts. Schools that have been historically underfunded and under-resourced also struggle with [teacher shortages](#). These schools are more likely to serve students from families with low incomes and students of color. In general, teachers' working conditions (including their salaries, class sizes, adequate support staff and the quality of school facilities) and neighborhood characteristics (such as safety and amenities) influence their [decisions](#) about where to teach. These factors present a challenge for policymakers: Even if certain policies can recruit teachers to the schools with the most pressing vacancies, retaining teachers in those positions may require a different set of policies.

Shortages may be more severe when equitable access to quality teaching is taken into consideration. While [measuring](#) teacher quality is complicated, policymakers may be interested in considering teacher diversity, teacher preparation and years of experience when thinking of staffing every position with a high quality teacher. Regarding teacher diversity specifically, a [growing body of evidence](#) demonstrates that teachers of color offer significant academic and social benefits to students, particularly the students who share their racial/ethnic identity.

Key Terms

The terms **teachers of color** and **students of color** refer to individuals who identify as African American or Black, American Indian/Alaskan Native, Asian, Latine/Hispanic, Pacific Islander, or as multiracial.

In addition to recruiting more teachers of color, states may benefit from considering the [distribution](#) of teachers of color. Some schools and districts hire and retain many teachers of color, while other schools have [little or no diversity](#) in teaching staff.

Concern about teacher shortages is not new. [Many states](#) have reported [similar shortages](#) for decades. Some recent evidence has prompted speculation that shortages [may be worsening](#), as the consequences of the COVID-19 pandemic may have decreased [interest in the field](#) and accelerated [teacher turnover](#). It is still [unclear](#) whether these factors will translate to dramatic changes in the teacher workforce, though the recent attention to the issue may obscure the long-term persistence of teacher shortages. While current shortages may be worse, they are certainly not new.

State Policy Action Across the Teacher Pipeline

At each stage of the teacher pipeline, state policymakers have a range of policy levers at their disposal to address teacher shortages, though finding long-term solutions requires a robust and coherent strategy across the pipeline — from interest in the field through career advancement. Additionally, strategies to recruit and retain teachers are most effective when targeted at a state's specific context and needs, though currently state policy regarding teacher recruitment and retention is often broad. As a first step in understanding and addressing shortages in their states, policymakers often consider data collection and stakeholder engagement.

Data Collection and Stakeholder Engagement

Collecting data on critical shortage areas, teacher demographics and teacher preparation program enrollment — and disaggregating that data by school and district — can help policymakers better understand the context of teacher shortages in their states and implement targeted programs to alleviate shortages. Similarly, convening a task force allows state policymakers to get input from stakeholders and consider the best options to mitigate their unique shortages. State policymakers may also consider the effectiveness and outcomes of their state's current programs to determine what is needed to improve recruitment and retention.

Collecting data and convening stakeholders can also help state leaders understand and improve the working conditions and supports available for teachers, which is important for recruiting prospective teachers and retaining teachers already in the field. For example, recent [research](#) shows that job-related stress is among the top reasons teachers consider leaving the profession and [demonstrates](#) a relationship between school climate and teacher retention, especially in schools with a high proportion of students experiencing poverty. By better understanding teacher working conditions through data, task forces and other means, state leaders can work to implement programs to support positive working conditions and increase teacher recruitment and retention.

State Example

Louisiana passed [legislation](#) in 2021 to create the [Teacher Recruitment, Recovery, and Retention Task Force](#). This task force is required to study the declining enrollment in teacher preparation programs, and strategies and best practices to increase employment rates and retention of teachers. The task force comprises 17 members, including state policymakers, advocacy organizations, unions and teachers. The task force is charged with exploring issues, developing recommendations and proposing legislation on various topics related to teacher recruitment, recovery and retention.

Compensation

Compensation influences teacher recruitment and retention throughout the teacher pipeline. Initial compensation can attract candidates to the field and help retain early career educators. Some research has found that the impact of increased salaries on teacher turnover is especially pronounced for inexperienced teachers, which may be an important consideration given the fragility of retention in the first few years of a teacher's career. Additionally, continued compensation and opportunities for salary increases can help retain educators well into their careers.

In addition to traditional compensation, policymakers often consider more [specific](#) compensation packages and incentives focused on recruiting and retaining high-quality educators in understaffed subject areas and in schools with shortages. For example, some states, like [Massachusetts](#) and [Minnesota](#), offer signing bonuses for certain educators. Though compensation can be an important policy lever to recruit and retain educators, research shows that these efforts must be [sufficient](#), [sustained](#) and [paired](#) with other recruitment and retention strategies to make a difference.

State Example Continued

A [preliminary report](#) was released in December 2021 and a final report will come in 2022. The preliminary report includes recommendations for the Louisiana Department of Education and the board of regents for recruitment, recovery and retention. They include expanding the pre-educator pathway strategy in high schools; researching the feasibility of teacher loan forgiveness programs and/or additional incentives for teachers in statewide and local content shortage areas; providing research and guidance for teacher well-being and reducing teacher burnout; expanding teacher pipeline supports for aspiring and current principals; and executing statewide listening sessions with educators to discuss the opportunities and barriers to teacher retention.



Interest in the Field

With [research](#) consistently demonstrating persistent shortages in specific subjects and geographic locations, policymakers are interested in levers to increase initial interest in the teaching field, including initial and ongoing compensation, statewide marketing campaigns, incentives for substitute teachers and other support staff to become certified as full-time teachers and Grow Your Own programs. Given some of the specific shortages, some states also focus their initial recruitment efforts on specific populations of teachers, such as teachers of color, teachers in rural communities or STEM teachers.

State Policy Lever: Grow Your Own Programs

Many states have turned to Grow Your Own programs in an effort to increase the number of teachers in their states — often with a specific focus on shortage areas. Grow Your Own programs are partnerships between districts, postsecondary institutions and communities that help recruit local individuals and employ them in the community's schools. Often, these programs are focused on recruiting either high school students or paraprofessionals to become fully licensed teachers. Additionally, [research](#) suggests that Grow Your Own programs may lead to better teacher retention and can help diversify the teacher workforce.

State Example

Washington offers a high school teacher academy, [Recruiting Washington Teachers](#), which focuses on recruiting diverse students and supporting them in exploring and preparing for careers in education, especially in subject-shortage areas and geographic shortage areas. According to a 2020-21 [report](#), 79% of participants in the program identify as individuals of color, and two out of three participants said that the program strengthened their plans to attend college. According to the report, students consistently name the practicum experience — hands-on experience that includes tutoring and teaching opportunities — as the highest-rated program component.



Initial Preparation and Certification

Policymakers may also consider strategies to support students through the initial preparation and certification process to ensure enough candidates become certified and enter the classroom as teachers to fill the state's current vacancies. Adequate and quality training, including quality [clinical experience](#), can better prepare teachers for the classroom — potentially leading to [stronger retention rates](#). Clinical experience refers to the extended practice in teaching that prospective teachers complete prior to full certification. Policy levers often used to support this stage of the teacher pipeline include alternative routes to certification, efforts to improve teacher preparation, robust clinical experience requirements, examining licensure requirements and financial support.

State Policy Lever: Financial Support

Teacher certification and preparation [expenses](#) add up quickly and can serve as barriers to entry for students interested in teaching. Survey [results](#) from one educator preparation program found that more than 80% of students worry about their financial situation. A lack of financial support can also be a barrier to recruiting and retaining a diverse teacher workforce, given the [disproportionate burden](#) of student loans for Black students in particular. To reduce some of these barriers, policymakers often invest in financial support for teacher candidates in the form of scholarships, loan forgiveness, student-teacher pay or by waiving fees for licensure assessments for specific candidates.

State Example

Maryland [offers](#) loan repayment assistance for public teachers who have taught in the state for at least two years; have received the highest performance evaluation rating for the most recent year available; and who teach in specific high-need subject areas or in schools serving large percentages of students with families from low incomes. The state also [allows](#) the Howard County Public School System to establish a loan repayment assistance program to attract, recruit and retain diverse and qualified teachers reflective of the student population in the county. Students who receive the loan repayment must commit to teach in the Howard County Public School system for at least five years.

Alternative Preparation Programs

Alternative certification enrollment has [grown](#) substantially in recent decades, though these programs vary widely in their requirements and design. They are typically geared toward individuals who already hold a bachelor's degree and allow them to obtain teacher certification without completing a teaching degree or advanced degree. The programs tap into a pool of candidates that traditional teacher preparation does not, and some research [demonstrates](#) that alternative preparation programs recruit a more diverse pool of teacher candidates. While some alternative routes fast-track teachers into the profession, others emphasize extended time in clinical practice, often under a mentor teacher while concurrently completing relevant coursework.

With strong implementation, [clinical experience](#) has demonstrated benefits for teacher retention and teacher quality. However, teachers who are fast-tracked into the classroom do not have access to the kinds of robust [teacher preparation](#) that leads to better teacher retention and higher teacher quality, including extended clinical experience, mentorship and pedagogy training. It is also worth noting that although alternative preparation programs are more effective at recruiting a diverse pool of candidates, they have also [demonstrated](#) higher rates of attrition for all candidates, potentially offsetting any gains in teacher diversity.



Early Career Support

The early years of a teacher's career are a vital and fragile time, as an estimated [30%](#) to [45%](#) of teachers leave the profession within the first five years. Teachers also [improve rapidly](#) as they further refine their practice. State efforts to recruit diverse and highly qualified teachers are at risk without early career teacher retention. To retain early career teachers, state leaders often consider induction and mentorship programs and a variety of financial supports for early career teachers, including initial and ongoing salary, loan forgiveness tied to years of service, signing bonuses and housing support.

State Policy Lever: Induction and Mentoring

Many state policymakers turn to induction and mentoring programs to support early career teacher retention. Induction and mentoring programs support early career teachers by matching them with an experienced mentor teacher who provides them with feedback on their teaching practice and support as they adjust to the profession. The programs can also include seminars, time to collaborate with or observe other teachers, coaching and feedback from a variety of experienced teachers, and reduced workloads. Induction and mentoring programs are [associated](#) with increased teacher retention and improved effectiveness for new teachers.

State Example

Alaska employs select retired teachers as full-time mentors for first- and second-year teachers — a [program](#) based on the model developed at the New Teacher Center. Mentors use formative assessment tools to guide mentoring activities, and the program has [demonstrated success](#) in improving the retention of early career teachers. Before the program's implementation, the retention rate for new teachers was about 68%. According to the most recent data, the average retention rate of early career teachers in the induction and mentorship program averages 79%.



Career Advancement

Intentional support, attractive working conditions, and growth opportunities beyond the first few years of a teacher's career are essential for overall teacher retention. [Teachers](#) with more experience tend to be more effective, which makes retention after the first few years of a teacher's career vital for student success and achievement. State policymakers often leverage [career advancement](#) policies to increase teacher retention, including retention bonuses, teacher leadership, licensure advancement, and effective evaluation, support and feedback. Teacher leadership and licensure advancement policies encompass a variety of actions to support teacher retention, including [professional development](#), mentorship and tiered licensure systems.

State Policy Lever: National Board Certification

National Board Certification is an optional advanced certification that is well-renowned for providing teachers with meaningful professional development while growing in their careers. Many studies [demonstrate](#) that teachers who obtain National Board Certification are more effective than their peers without the certification. Additionally, teachers who obtain National Board Certification have [lower](#) turnover rates. In response to the demonstrated positive impacts of National Board Certified teachers, some states implement incentive programs for teachers to obtain the certification.

State Example

Arkansas [provides](#) an annual incentive bonus of \$2,500 to any National Board Certified classroom teacher or instructional staff employed full-time in a public school. Board certified teachers who are employed full-time in a school with high poverty rates are eligible to receive a bonus of between \$5,000 and \$10,000 depending on the context of the school. Teachers can receive the bonuses for 10 school years.

Final Thoughts

Teacher shortages are common, particularly in specific subjects and communities, and can be costly for school districts and students. A coherent and comprehensive strategy that addresses each stage of the teacher pipeline may help state policymakers confront these chronic and specific shortages. To ensure that students of all backgrounds have access to high-quality teachers, policymakers may also consider focusing their attention on how teachers are distributed across schools, as shortages have historically impacted certain student populations more than others. Despite nationwide dialogue about teacher shortages, addressing teacher shortages based on their state's specific labor markets will help state policymakers ensure that their solutions are effective, sustainable and equitable. The persistence of shortages in recent decades suggests that policy interventions are unlikely to provide quick fixes, but sustained, focused efforts will help to ensure all students have access to high-quality teaching.

Acknowledgments

The authors wish to extend a thank you to all the reviewers of this product whose time and knowledge informed this brief.

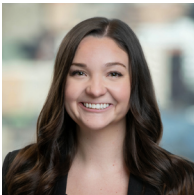
About the Authors

Tiffany McDole



As policy director, Tiffany contributes to a variety of policy issues. She brings more than a decade of experience working to improve teaching and learning, including work at the Tennessee Department of Education and as an advisor to education leaders while at TNTP. Tiffany began her career as a fifth grade teacher and is passionate about ensuring all students have access to an excellent education. Contact Tiffany at tmcdole@ecs.org.

Cassidy Francies



As a policy researcher, Cassidy supports the Policy Team by tracking legislation and responding to information requests on a variety of education policy issues. Prior to joining Education Commission of the States, Cassidy completed her bachelor's degree in political science and psychology at the University of Colorado Boulder. Cassidy is passionate about providing state leaders with quality information to support them in improving education systems for all students. Contact Cassidy at cfrancies@ecs.org.

