



Solving the Teacher Shortage

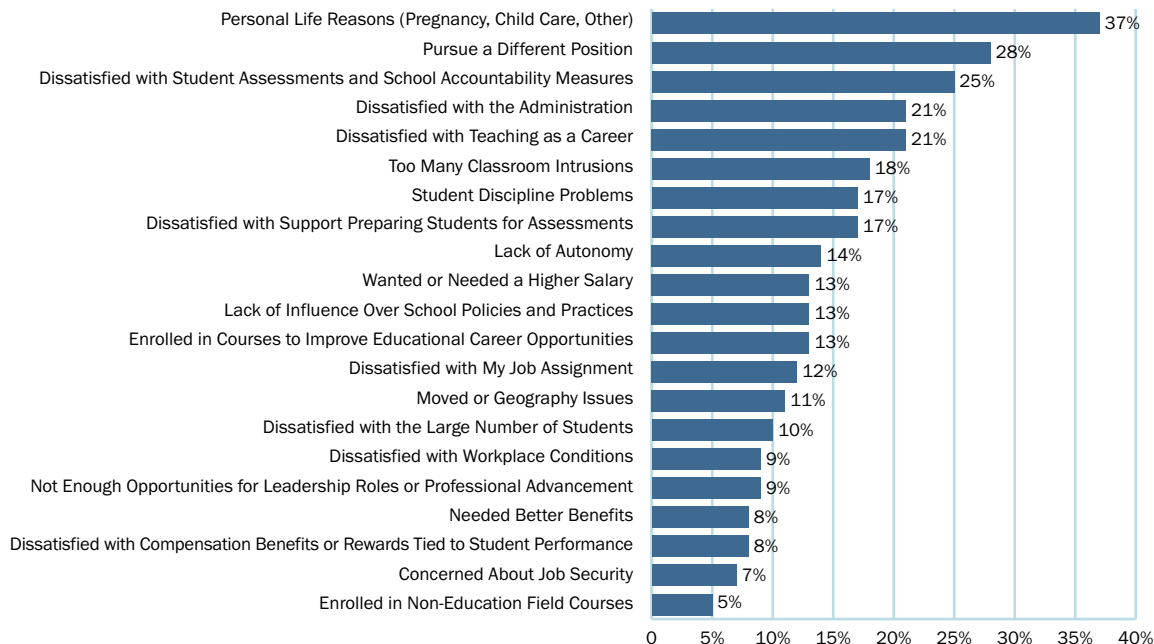
How to Attract and Retain Excellent Educators

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Figure 2

Why Do Teachers Leave?

The Percentage of Voluntary Leavers Who Rated the Factor as Extremely or Very Important in Their Decision to Leave



Note: Percentages do not add to 100 because teachers can select multiple reasons.

Source: LPI analysis of the Teacher Follow-up Survey (TFS), 2013, from the Schools and Staffing Surveys, National Center for Education Statistics.

Another important consideration is what might encourage those who have left the teaching profession to re-enter it. Particularly in times of teacher shortages, the pool of potential re-entrants represents a significant supply of credentialed, experienced teachers. Here, recent data from the National Center for Education Statistics offer some important insights (see Figure 3). Of the public school teachers who left the profession, a subset said they would consider returning to the classroom, citing a number of factors that would be extremely or very important in their decision to return, including:

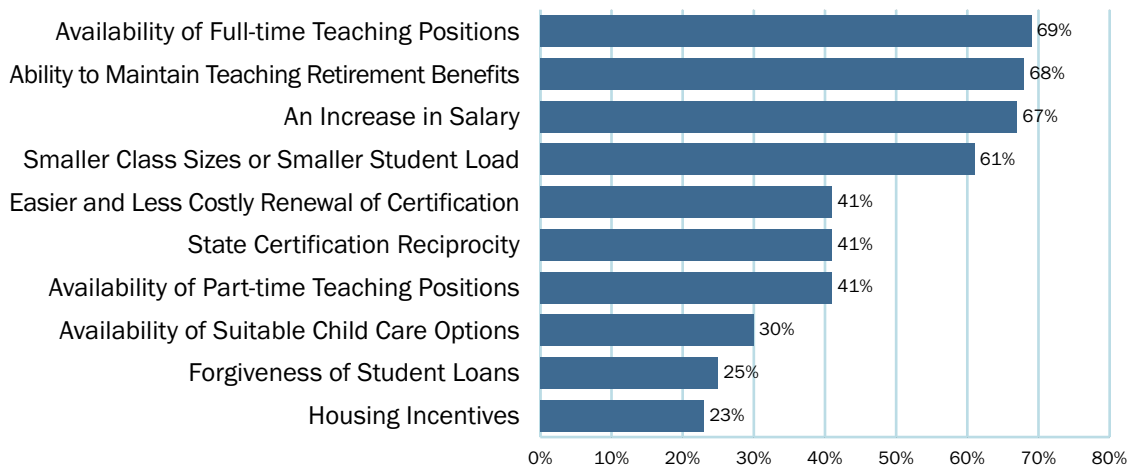
- The ability to maintain retirement benefits (68%);
- Salary increases (67%);
- Smaller class sizes/student loads (61%);
- Easier and less costly renewal of teacher certification (41%);
- State certification reciprocity (41%);
- Student loan forgiveness (25%); and
- Housing incentives (23%).

The most frequently cited factor was the availability of full-time teaching positions (69%). This might have been related to the timing of the 2012 National Center for Education Statistics survey, which fell on the heels of large numbers of layoffs during the Great Recession.³⁰

Figure 3

What Would Bring the Leavers Back?

The Percentage of Leavers Who Rated the Factor as Extremely or Very Important in Their Decision to Return



Note: Survey responses from public school teachers who left after the 2011–12 school year and said that they would consider returning to the teaching workforce. Percentages do not add to 100 because teachers can select multiple reasons.

Source: LPI analysis of the Teacher Follow-up Survey (TFS), 2013, from the Schools and Staffing Surveys, National Center for Education Statistics.

The results from this national survey suggest that the following three factors most frequently contribute to teachers’ decisions to enter, remain in, and/or leave the teaching workforce:

1. Family and personal reasons, including pregnancy, child care, and geographic moves.
2. The compensation, status, and job satisfaction offered by other career opportunities as compared to teaching.
3. Working conditions, including school accountability and testing systems, the quality of administrative support, and teacher input into decision-making.

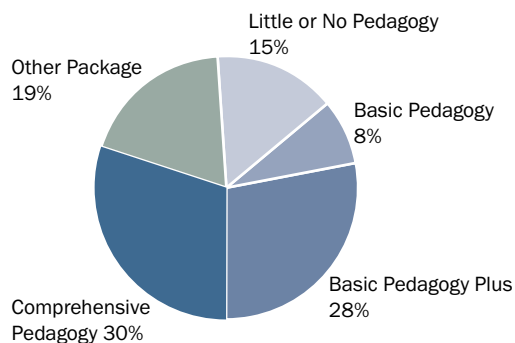
Several other studies echo these results and also highlight other factors that play a major role in teacher retention, including the quality of preparation and support that new teachers receive prior to and immediately upon entering the profession.⁵¹

Costs of Teacher Turnover

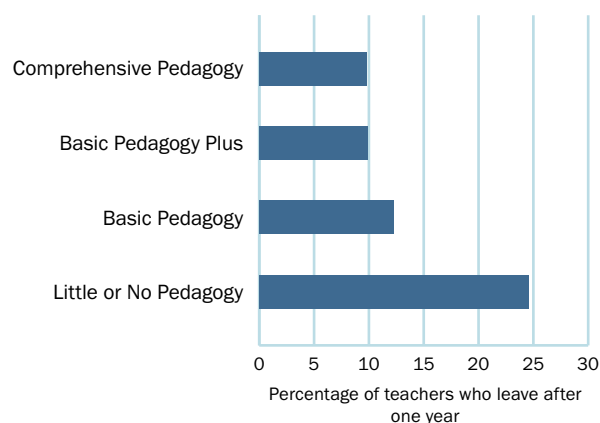
The costs of teacher attrition are significant. Individual teachers, as well as taxpayers—through government support for public colleges and student financial aid—invest in training costs that are often never recouped. Districts pay a substantial cost to recruit, hire, and train a steady stream of new teachers, with the highest-poverty districts shouldering an even greater burden because they have the highest rates of teacher turnover.⁵² High-need schools must continually invest in recruitment efforts, professional support, and training for new teachers without reaping the benefits of many of these investments.⁵³

Figure 4 Beginning Teacher Preparation

Percentage of First-Year Teachers Receiving Each Preparation Package, 2004–05



Likelihood That Beginning Teachers Leave After One Year Based on Their Training, 2004–05



Little or No Pedagogy: Little or no practice teaching; one course or less in teaching methods; little or no other pedagogical preparation (i.e., how to select and adapt instructional materials, coursework in learning theory and child psychology, observation of others' classroom teaching, formal feedback on their own teaching).

Basic Pedagogy: Full semester of practice teaching; no course in teaching methods; most other pedagogical preparation.

Basic Pedagogy Plus: Same as Basic Pedagogy, plus one to four courses in teaching methods.

Comprehensive Pedagogy: Same as Basic Pedagogy, plus five or more courses in teaching methods.

Other Package: Other mix of preparation.

Note: Percentages as reported from a personal correspondence with Richard Ingersoll.

Source: Richard Ingersoll, Lisa Merrill, and Henry May, *What Are the Effects of Teacher Education and Preparation on Beginning Teacher Attrition?* Consortium for Policy Research in Education, CPRE Report (#RR-82) (2014).

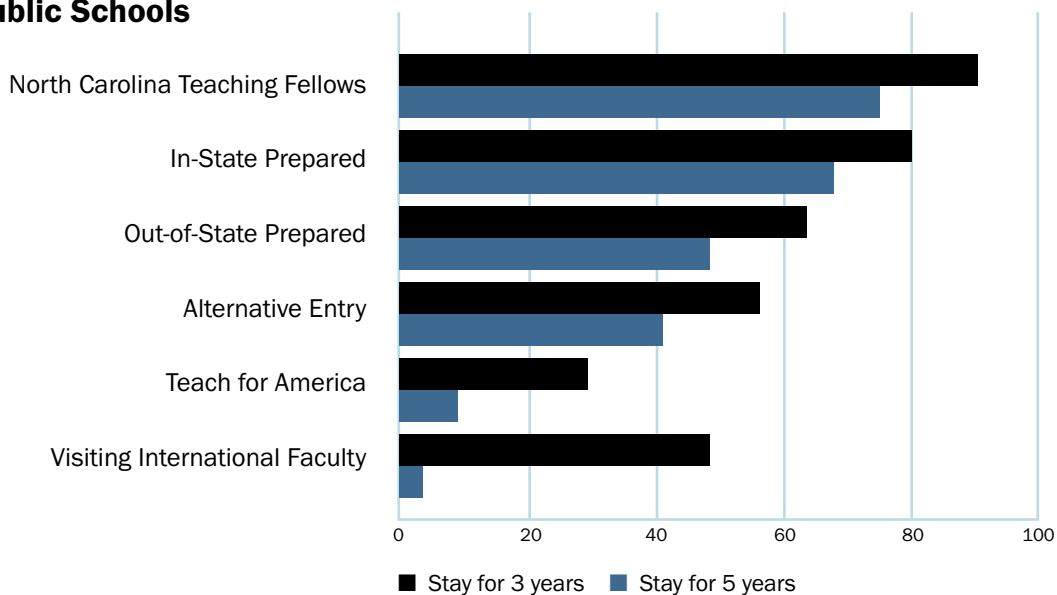
participants serve as the teacher of record while undertaking their coursework at night or on weekends, typically with little or no prior student teaching. Many candidates choose alternative programs because they cannot afford to forego a salary while undergoing preservice preparation, given the lack of financial support for intensive preservice clinical training.

A recent analysis of the nationally representative Schools and Staffing Survey found that the proportion of the teaching workforce entering via alternative programs has increased from 13% in 1999–2000 to 24% in 2011–12. At the same time, there is a widening gap in the turnover rate between alternatively certified and traditionally certified teachers. The authors note that “[f]ollowing the 2007–08 school year, [alternatively certified] teachers had more than two-and-a-half times the relative risk of leaving than [traditionally certified] teachers.”¹²⁶ Several studies have found that alternatively certified teachers leave the profession at higher rates than regularly certified teachers, and that disparities are even greater in high-minority schools.¹²⁷ As discussed above, these higher teacher turnover rates can negatively impact student achievement in these schools, both among the students in the classrooms of teachers who leave as well as those in the classrooms of those teachers who stay.¹²⁸

Other studies similarly have found that teachers’ perceptions of their preparedness and plans to stay in teaching are stronger for those who undertake preservice programs in which they complete

Figure 5

Percentage of Teachers Who Remain Teaching in North Carolina Public Schools



Note: This figure depicts the percentage of teachers who return for a third and fifth year of teaching in North Carolina public schools for three cohorts of first-year teachers, regardless of subject taught, 2004–05, 2005–06, and 2006–07.

Source: Gary T. Henry, Kevin C. Bastian, and Adrienne A. Smith, “Scholarships to Recruit the ‘Best and Brightest’ Into Teaching: Who Is Recruited, Where Do They Teach, How Effective Are They, and How Long Do They Stay?,” *Educational Researcher* 41, no. 3 (2012): 83–92.

South Carolina’s program has demonstrated similar success. Approximately 72% of the program’s 1,502 graduates from 2000 to 2011 were still employed in South Carolina public school districts in 2016.

In some states, such as California, loan forgiveness and grant programs were eliminated during fiscal crises,¹⁴² but other states, including Connecticut, Delaware, Massachusetts, Michigan, Missouri, Montana, West Virginia, and Washington, are placing a renewed focus on programs that provide financial support for new teachers as a means to attract and retain high-ability teachers.¹⁴³

2. Develop teacher residencies.

Another increasingly popular strategy to recruit and retain talented and diverse candidates in high-need schools is the teacher residency model. In contrast to alternatives that require teachers to train while teaching in order to maintain a source of income, teacher residencies offer an alternative model that underwrites the cost of preparation for candidates while still allowing for full preparation prior to employment.

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Beyond Compensation: Working Conditions Matter Too

Many schools in economically disadvantaged communities struggle to recruit and retain effective teachers.²⁹⁰ In response, some schools and districts offer a financial bonus to entice teachers to move to hard-to-staff schools, which typically serve a large proportion of low-income students and students of color.²⁹¹ Sometimes this bonus is referred to with the phrase, “combat pay,” which suggests that teaching in an economically disadvantaged community is similar to entering a military combat zone. This policy assumes that financial enticements will attract well-prepared, effective teachers to the school that will be sufficient to improve school and student achievement.²⁹² However, a recent study challenges these assumptions, with its finding that many teachers prefer to teach in high-poverty schools as long as they have the working conditions required to provide effective instruction (e.g., supportive relationships with colleagues and the necessary resources).²⁹³

While some financial bonuses have increased the number of teachers in high-poverty schools or decreased turnover during the period the financial incentive was provided (see Section III), these bonuses have been largely unsuccessful in improving the long-term stability and talent of teachers in such schools. One explanation is that financial bonuses do not address the other dysfunctions of under-resourced, high-need schools, such as poor working conditions.²⁹⁴ More specifically, “teachers in high-poverty schools are much less likely to be satisfied with their salaries or to feel they have the necessary materials available to them to do their job. They also are much less likely to say that they have influence over decisions concerning curriculum, texts, materials, or teaching policies.”²⁹⁵ All of these factors are associated with teachers’ decisions to stay in or leave a particular school. Moreover, the federal Schools and Staffing Survey has found that the best-paid teachers in low-poverty schools earn over 35% more than those in high-poverty schools.²⁹⁶

States and localities that have implemented these types of financial incentives have largely failed to attract effective teachers to hard-to-staff schools. For example, one analysis noted:

Several years ago, South Carolina tried to recruit “teacher specialists” for the state’s weakest schools, and despite an \$18,000 bonus, the state attracted only 20% of the 500 teachers they needed in the first year of the program, and only 40% after three years.²⁹⁷

By contrast, investments that have improved leadership, learning opportunities, and teaching conditions in low-performing schools have been found to both reduce attrition and increase student achievement. For example, the successful turnaround of nine of Tennessee’s lowest-performing schools in Chattanooga’s Hamilton County School District sought to recruit teachers identified as highly effective to the schools with bonuses of \$5,000. A few of these teachers were willing to transfer, but not nearly enough. The school district replaced many of the previous principals, created a leadership program for teachers, and funded teacher-coaches, while transforming professional development from one-shot workshops to job-embedded activities led by teachers. Teachers also were supported to pursue a specialized master’s degree in urban education.

This comprehensive investment led to a more stable teaching force and dramatic gains in reading and mathematics achievement. At the end of the day, it turned out that the largest student gains were produced not by the teachers who had been imported with bonuses but by existing staff who had become much more effective. A study of the intervention concluded the initiative “was about much more than pay incentives and reconstitution; the district invested heavily in programs to train teachers, in additional staff to support curriculum and instruction, and in stronger and more collaborative leadership at the school level.”²⁹⁸

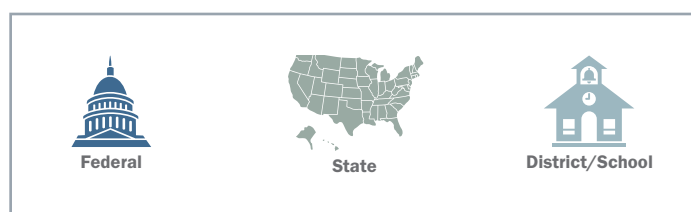
VIII. Policy Recommendations

In the sections above, we described a number of policies that have the potential to improve the recruitment and retention of excellent educators, including teachers in hard-to-staff schools. Below we summarize this set of recommendations, informed by our review of the factors influencing teachers' decisions to enter and exit the workforce as well as research on existing efforts to address these causes.

The recommendations are broken down by the five categories previously discussed:

1. Salaries and other compensation.
2. Preparation and costs to entry.
3. Hiring and personnel management.
4. Induction and support for new teachers.
5. Working conditions, including school leadership, professional collaboration, shared decision-making, accountability systems, and resources for teaching and learning.

For each recommendation, we suggest the appropriate level of government for carrying out the policy. In many cases, federal, state, and local governments must respond simultaneously because one policy, in isolation, will do little to improve teacher recruitment and retention. For example, research on salaries and working conditions in hard-to-staff schools suggests that policymakers should both raise salaries as well as provide for more collegial, supportive, well-resourced environments in order to recruit and retain teachers in hard-to-staff schools. Similarly, research suggests that policymakers interested in induction programs should also consider policies that encourage collaboration and mentorship within a school, as opposed to a standalone induction policy. The interdependency of the recommended policies suggests that policymakers should adopt a suite of mutually reinforcing strategies.



1. Salaries and Other Compensation



States and districts should increase teacher salaries in schools and communities where existing salaries do not provide for a middle-class living or where significant salary differentials exist. **States** have sought to accomplish this by establishing a minimum statewide salary minimum, with state support to districts to achieve this outcome, coupled with higher standards for teacher preparation and licensing. An effective strategy would also include adjusting salaries for regional cost-of-living differentials so that purchasing power is equalized. **Districts** can negotiate salary structures that incentivize retention and make compensation packages more competitive in the local labor market. Other strategies include salary incentives for teachers who demonstrate effectiveness through National Board Certification.



States and **districts** should use federal levers in the new Every Student Succeeds Act (ESSA) to provide low-income schools and districts with additional resources to attract and retain high-quality teachers. States and districts can take advantage of the funding opportunities under Title II to put in place programs that can improve teacher recruitment and retention. To address salaries specifically, Title II, Part A funds can be used for the development of career-advancement opportunities that provide differential pay, as well as other incentives to recruit and retain teachers in high-need academic subjects and low-income schools.³²³ The law also maintains the Teacher Incentive Fund—now called the Teacher and School Leader Incentive Fund—which authorizes approximately \$230 million in federal competitive grant funds to local educational agencies to support performance-based compensation systems and human-capital management systems.³²⁴



Districts should be mindful of resource inequities associated with inequitable distributions of teachers, providing the public with accurate school spending and teacher quality data on annual report cards. ESSA requires districts, as part of the comprehensive support and improvement plan they develop for each of their lowest-performing schools, to identify and establish a plan for addressing resource inequities (e.g., salaries and working conditions such as class sizes and pupil loans) that **states** are then responsible for monitoring.³²⁵



The **federal** government should assertively implement and enforce ESSA's provisions for funding equity and teacher equity. The law requires states to develop plans describing how low-income students and students of color “are not served at disproportionate rates by ineffective, out-of-field, or inexperienced teachers” and to evaluate and publicly report on their progress in this area. Further, districts are required to “identify and address” teacher equity gaps.³²⁶ **States** can adopt research-based definitions of the terms ineffective, out-of-field, and inexperienced and provide technical assistance and support to districts in addressing teaching equity gaps using Title II funds.³²⁷ **Districts** also can take advantage of the weighted student-funding pilot program under ESSA to help equalize access to experienced, in-field, and expert teachers, using this funding flexibility on initiatives to attract and retain high-quality teachers in low-income schools and in programs serving English learners and special education students.³²⁸



States and **districts** could pilot other strategies to increase teachers' overall compensation. These might include housing incentive programs as well as career-advancement opportunities that offer increased pay when teachers demonstrate expertise and take on additional leadership roles. Federal funding can be used to support these efforts, leveraging Title II, Part A funds under the Every Student Succeeds Act to support career advancement opportunities tied to increased pay and Housing and Urban Development initiatives, such as “The Teacher Next Door” program to support housing incentive programs in hard-to-staff communities. Given the paucity of existing research on these strategies, the **federal** government and **states** also should fund research to study how these types of creative compensation structures impact teacher recruitment and retention.

2. Preparation and Costs to Entry



Federal and **state** governments should cover the entire cost (through service scholarships or loan forgiveness programs) of high-quality preparation programs for new teachers who commit to teaching in high-need communities or in grade levels or subjects with shortages for a significant period of time (typically four years or more), so that more new teachers can receive the financial support they need to enter the profession well prepared to succeed.



The **federal** government should increase existing investments in the teacher residency model (e.g., Teacher Quality Partnership Grants) to support the creation or expansion of additional teacher residency programs in high-need districts that provide intensive clinical training, tightly integrated with rigorous coursework to prepare high-ability candidates to meet local workforce needs in key teaching areas. **States** should consider developing similar state grant programs. **Districts**, in partnership with local institutions of higher education, could develop teacher residencies by investing a portion of the funds they receive under Title II of ESSA as well as accessing funds under the Higher Education Act (HEA) Title II and AmeriCorps, to develop teacher residencies, partnering closely with local institutions of higher education to support the development of these programs.



Districts and **states** could create high school courses and programs such as the South Carolina and North Carolina teacher cadet programs that offer pathways into the teaching profession for interested high school students, leveraging federal Perkins Career Technical Education Act funds for this purpose. School districts, especially those with hard-to-staff schools, can also partner with teacher preparation programs to create Grow Your Own pathways to train paraprofessionals, teachers' aides, afterschool program providers, and other local community members who want to become teachers and who are most likely to remain in the community. **States** can fund statewide pathway programs, such as California's Paraprofessional Teacher Training Program, and provide matching grants to districts to support these types of programs. Federal Workforce Innovation and Opportunity Act funds also can be used to support these types of comprehensive teacher training programs designed to address local workforce needs in times of teacher shortages.

3. Hiring and Personnel Management



Districts and **schools** can strengthen recruitment and hiring practices and ensure decisions are made with the best candidate pool, under the right timing for a successful transition for a new teacher and based on the best information possible. This might include investing in teacher development pipelines, strengthening relationships with local teacher preparation programs, involving existing staff and community members in recruitment and hiring processes, and instituting a multistep hiring process that includes a demonstration lesson and school visit.



States and **districts** can, through legislative changes, collective bargaining agreements, or incentive programs, revise timelines for voluntary transfers or resignations, and for budget deadlines so that hiring processes can take place as early as possible, ideally in the spring of the prior school year.



Districts can build training and hiring pipelines for new and veteran teachers. To do this, districts can develop strong partnerships with local teacher preparation programs for student teaching placements. **Districts** can also invest in Grow Your Own models and residency models whereby districts build their teacher pipeline from within.³²⁹ **States** can support these approaches by providing grants and expertise to districts interested in implementing Grow Your Own or residency models.



Additionally, **districts** should develop systems for tracking teacher turnover, including exit interviews, to better target programs aimed at reducing turnover. **States** also can include teacher-turnover data in their school accountability systems to encourage districts to systematically track teacher turnover. **Districts**—particularly high-need districts—should consider revisions to salary schedules so that expert, experienced teachers who want to transfer into the district do not lose salary credit based on years of experience—a needless disincentive for highly desirable teachers who might otherwise choose to work in a high-need district. **States** can develop reciprocity agreements with other states to attract mobile, out-of-state teachers. **States** might also consider investing in the design and implementation of online hiring platforms where teachers can easily identify the steps necessary to be hired by the state or transfer into the state, as well as an online interface where mobile teachers can easily add their prior experiences and credentials to become certified in a given state.



States, with support from the **federal** government, should examine the issue of pension portability for teachers. Current defined-benefit plans, which are not portable across states and even within states in some cases, create disincentives for teachers to remain in the profession when they choose to relocate, as most states do not allow teachers to bring their retirement benefits with them. A national discussion around pension portability is particularly timely given that the teaching workforce has changed in recent years, with fewer teachers spending their entire careers in the classroom in a single district, and many teachers working in charter schools that are not part of state pension systems.

4. Induction and Support for New Teachers



States and **districts**—with support from the **federal** government—should invest in high-quality mentoring and induction programs, which have been shown to increase retention, accelerate novice teachers’ professional learning, and improve student achievement. Given the benefits of induction for retention and effectiveness, these programs should be made available to all new teachers. The **federal** government can provide matching grants to states and districts that implement research-based induction programs. Particular attention should be paid to selecting and training expert mentors, and providing adequate release time to allow mentors and beginning teachers to engage in a full range of instructional support activities, such as classroom observations, coaching, shared lesson planning, and reflection. **States** can leverage funds through Title II of the Every Student Succeeds Act to develop statewide programs that require a range of induction supports as well as provide training and technical assistance for districts to implement these programs. **Districts** can design induction programs with the quality features that research suggests are most important for program effectiveness and provide the time and resources to support induction structures like mentoring, classroom observations, and collaborative planning time.

5. Working Conditions



States can invest in the development of high-quality principals by establishing a strong preparation standard for administrators. **States** and the **federal** government can also support efforts to recruit promising candidates into leadership positions and pay for their training through competitive service-scholarship programs. Such efforts can help ensure that administrators are prepared and ready to be effective leaders who can foster positive, collegial teaching and learning conditions.³³⁰ **States** can leverage funds under Title II of ESSA, which provides funding to support high-quality principal preparation programs, including school-leader residency programs offering a full year of clinical training. **States** and **districts** can apply for funds from ESSA’s School Leader Recruitment and Support Program, which authorizes competitive grants to recruit and train principals for high-need schools. **Federal** and **state** policies can support principal mentoring and professional development opportunities to continuously hone effective school leadership skills throughout their careers.



States and **districts** can invest, in part using funding under Title II of ESSA, in developing and implementing surveys of teachers to assess the quality of the teaching and learning environment and to help guide school improvement. As **states** develop new accountability systems under the Every Student Succeeds Act, they should include measures of teaching and learning resources in their systems, moving away from a “test and punish” approach and toward an “assess and support” approach. Such measures could incorporate teacher surveys and help identify schools in need of improvement, and bolster the capacity of principals to support teachers and create positive working conditions.



Federal and **state** policies can incentivize professional development strategies and the redesign of schools to provide for greater collaboration, such as by offering the former federal Smaller Learning Communities grants that provided financial support for large schools to establish common planning time and collaborative professional development for teachers. **Districts** and schools should update school design, scheduling, and the allocation of resources in order to provide teachers with the time necessary for productive collaboration.³³¹ For example, schedules must allow for regular blocks of time (e.g., common prep periods) for teachers who teach the same subject or those who share groups of students to collaborate and plan curricula together.³³²

IX. Conclusion

Recruiting and retaining excellent teachers is critically important for the success of future generations, especially for those living in underserved communities. Fortunately, decades of research on the factors that contribute to attracting and keeping teachers in the classroom can guide strategies to meet this challenge. Some states have proved that transforming human-capital systems to support a quality, stable educator workforce is possible. Comprehensive investments in the preparation, induction, and professional learning of teachers and principals as well as in the conditions necessary to support high-quality teaching and learning should be considered simultaneously.

There is no silver bullet solution to recruiting and retaining a 3-million person teaching workforce serving more than 50 million students across 50 states. Local contexts will determine what set of research-based policies are most appropriate for a given state, district, or school to ensure their teachers lead rather than leave the profession. School officials and policymakers also must recognize that there are many factors influencing teachers' decisions to enter and remain in teaching—and these factors are interdependent. A comprehensive set of policies is needed to address our emerging teacher shortage and to ensure every child is taught by a competent, committed teacher.