



EDUCATION COMMISSION
OF THE STATES
Your education policy team

MAY 2016

Mitigating Teacher Shortages: Financial Incentives

STEPHANIE ARAGON

The first brief in this series, *Teacher Shortages: What We Know*, explores research on teacher shortages and highlights recent state task force findings. This report is one of five policy briefs examining strategies states are using to address shortages:

1 ALTERNATIVE CERTIFICATION

2 FINANCIAL INCENTIVES

3 INDUCTION AND MENTORSHIP

4 EVALUATION AND FEEDBACK

5 TEACHER LEADERSHIP



Click on any
title to view
other reports
in this series.

Providing financial incentives can be an effective strategy to **recruit** and **retain** teachers. Definitions of three financial incentive programs are provided, followed by a summary of supporting research on this strategy, state policy examples and considerations for policymakers.



What are the financial incentives?

Despite an increase over the past decade, teachers' salaries in the United States do not compete with the average salary of similarly educated workers.¹ Although not the only contributing factor, insufficient pay and pay that fails to reward the best and brightest plays a role in the struggle to recruit and retain high quality teachers. In response to teacher shortages, a number of states have, or are considering, instituting statewide financial incentive programs for teachers and teacher candidates. In their 2016 state of the state addresses, at least 16 governors set forth proposals to ensure high-quality teachers are recruited, retained and better compensated, and legislatures and task forces across the states are considering policies on this front.²

Most states are implementing one or more financial incentive strategies to influence teacher pay, elevate the profession, and improve teacher recruitment and retention. These strategies can be placed into three primary categories: salary requirements, diversified pay and pay-for-performance.

SALARY REQUIREMENTS

States set minimum salary requirements to recruit quality teachers to the profession, equalize pay between districts and reduce teacher turnover. To date, at least:

- **Seven states** have minimum salary requirements.³ Districts in these states cannot offer salaries below state-established pay floors.
- **Seventeen states** use state salary schedules.⁴ Salary schedules dictate minimum salaries districts must pay teachers based on education credentials and years of experience. Education Commission of the States' *State Teacher Salary Schedules* by Michael Griffith addresses this approach in detail.

TEACHER SALARIES ACROSS THE STATES

The National Center for Education Statistics' (NCES) Schools and Staffing Survey provides state-by-state information on teacher salaries, based on teaching experience/degrees earned and salary supplements. The National Education Association provides state teacher salary comparisons going back to 2008-09. Texas A&M provides updates through 2013 of the NCES Comparable Wage Index, which can be used to make comparisons across geographic areas.

DIVERSIFIED PAY

To attract teachers to shortage subject areas and high-needs schools, many states offer targeted financial incentive programs. To date, at least:

- **Twenty-three states** have diversified pay.⁵ These states offer pay boosts to teachers who teach in high-needs schools and/or shortage subject areas. In addition, many states provide alternative financial incentives, such as compensation for prior work experience, loan forgiveness, housing assistance, tuition reimbursements and scholarships to help fill shortages.



PAY-FOR-PERFORMANCE

To recognize, advance and retain excellent teachers, many states factor performance into teacher salaries and bonuses. To date, at least:

- Sixteen states have established statewide pay-for-performance programs.⁶ At least nine additional states permit and/or encourage pay-for-performance. With performance pay, a teacher's evaluation scores or his/her ability to achieve specific student achievement goals impacts final take-home pay. Performance pay is based on student achievement results in nine states, and based on evaluation results in seven states.⁷

Table 1 provides 50-state information on each strategy.



What does the research say?

Financial incentives can and do play a role in teacher recruitment and retention. While new teachers are drawn into the profession because of other, less tangible rewards, demonstrably low pay keeps potentially promising candidates away⁸ and contributes to turnover.⁹ Research indicates that state financial incentive programs have the potential to direct teachers to shortage areas and ensure they stay, but they lose their lure if they are not sufficient, sustainable and paired with improvements to working conditions. To make a difference in recruitment and/or retention:

- Minimum salary requirements and schedules should be *sufficient*. Though competitive pay floors can help address teacher shortages, pay floors below market average lose much, if not all, of their relevance.¹⁰ This is the case in **Illinois**, for example, where the salary schedule requires districts to pay a starting salary of \$10,000.¹¹ A plan to gradually increase minimum state salary requirements and schedules until they are again competitive might help states working to improve recruitment and retention. Prominent teacher advocacy groups, though, argue that policymakers should be wary of "quality-blind" pay structures that do more to encourage the retention of low-performing teachers than of high-performing teachers.¹²

A NATIONAL STUDY OF TEACHERS FROM 2007-12 FOUND THAT THOSE WHO EARNED A BASE SALARY OF LESS THAN \$40,000 WERE 17 PERCENT LESS LIKELY TO CONTINUE TEACHING AFTER FIVE YEARS THAN THOSE WHO EARNED MORE THAN \$40,000.¹³

- Diversified pay should be *sustainable*. Diversified pay can entice high-performing teachers to high-needs schools.¹⁴ However, unless sustained, these strategies should be viewed more as recruitment strategies than long-term retention strategies. One oft-cited study of 10 school districts in seven states found that large signing and retention bonuses encouraged high-performing teachers to move to high-needs schools and improved retention while the bonuses were in place. However, once the incentives ended, retention returned to previous levels.¹⁵ Upfront tuition subsidies, loan forgiveness programs, ongoing salary premiums and retention bonuses in addition to other nonmonetary incentives and supports might help high-needs schools retain teachers for longer periods of time.¹⁶



■ Like the other financial incentive programs, pay-for-performance should be *paired with improvements to working conditions*. Research indicates that the most effective financial incentive programs are “implemented as part of a broader, holistic retention strategy, rather than as standalone initiatives.”¹⁷ Although the documented impacts of pay-for-performance models on teacher recruitment and retention are mixed,¹⁸ some of the more successful programs couple financial incentives with other supports (such as job-embedded professional development, collaborative teacher groups and/or principal involvement) and opportunities for advancement (such as career ladders and/or teacher leader positions).¹⁹

Washington, D.C.’s performance pay system, for instance, supports teachers through formal observations, regular personalized coaching and online access to instructional guidance and resources.²⁰ The program has proved to be effective in recruiting and retaining high-performing teachers, exiting low-performing teachers and improving student achievement.²¹



State examples



North Carolina

North Carolina’s Teaching Fellows program, established in 1986, recruited the state’s top high school students into teaching by offering state-funded, four-year competitive scholarships in return for a commitment to teach in the state for at least four years.²² Fellows not meeting their teaching commitment had to repay the state for the amount received plus interest. In 2011, the North Carolina General Assembly voted to end the program and remove all program funding by spring 2015.

A 2012 study found that the fellows program produced qualified and effective teachers who had higher long-term (five years or more) retention rates than alternatively or other traditionally prepared teachers.²³ Unfortunately, despite a program goal to recruit quality teachers for lower-performing higher-poverty student populations, the authors of the study also found that fellows were less likely to teach disadvantaged student populations than were other teachers. They recommend additional financial incentives for recruits willing to work in high-needs environments.



Iowa

Iowa’s Teacher Leadership Compensation system, established in 2013, was created to fund district innovations aimed at recruiting, rewarding and retaining promising and effective teachers.²⁴ School districts received planning grants to create their programs, and approved districts receive additional per pupil allocations from the state to support their efforts. Districts are given the flexibility to design systems meeting state-prescribed goals which include offering: competitive starting salaries, professional development and leadership opportunities, supplemental pay tied to leadership and effectiveness, opportunities for teacher collaboration, and improved student achievement through strengthened instruction.



A 2015 internal review showed that, among other accomplishments, the program has helped districts improve teacher retention rates. Ninety-four percent of participating districts mostly or fully met their goal of attracting and retaining quality teachers.²⁵ The state department of education has contracted with the American Institutes for Research to provide a report of program implementation, which will be released mid-2016. The program will be subject to legislative review at least every three years, beginning in 2017.²⁶ For more information about the leadership component of this program, see Education Commission of the States' *Mitigating Teacher Shortages: Teacher Leadership* by Micah Ann Wixom.



Policy considerations

When revising or creating new financial incentive policies or programs to support teacher recruitment and retention, policymakers might consider:

- Targeting funding to perennial shortage subject areas and high-needs schools.
- Identifying a sustainable funding stream dedicated to increased salaries and incentives.
- Bundling differing financial incentive strategies with each other and/or with other, less costly reforms.
- Allowing for and encouraging locally-developed compensation models that include measures of teacher effectiveness and growth. This might include creating “opt-in” reforms where districts interested in experimenting with pay reform can apply for additional resources to provide new incentives to teachers.
- Devising a plan to regularly evaluate and update pay floors and incentive programs.

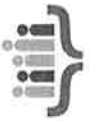


TABLE 1: SALARY REQUIREMENTS, DIVERSIFIED PAY AND PAY-FOR-PERFORMANCE

Most often teacher pay and pay structures are determined by school districts. Even when state policies establish pay floors, salary schedules and incentives, districts can provide additional funding to attract and keep teachers. In many cases, states permit/encourage/fund district innovations but do not mandate district participation. It should be noted that the data below captures only state level policies and not individual district level policies.

| State | Minimum salary requirement ²⁷ | Salary schedule ²⁸ | Diversified pay (high-needs schools and/or shortage subject areas) ²⁹ | Pay-for-performance (salaries or bonuses) ³⁰ |
|----------------------|--|-------------------------------|--|---|
| Alabama | | X | | |
| Alaska | | | | |
| Arizona | | | | |
| Arkansas | | X | X | X |
| California | X | | X | |
| Colorado | | | X | |
| Connecticut | | | | |
| Delaware | | X | X | X |
| District of Columbia | | | | |
| Florida | | | X | X |
| Georgia | | X | X | X |
| Hawaii | | X | X | X |
| Idaho | | X ³¹ | | |
| Illinois | | X ³² | | |
| Indiana | | | | X |
| Iowa | X | | | |
| Kansas | | | | |
| Kentucky | | X | X | |
| Louisiana | | | X | X |



EDUCATION COMMISSION
OF THE STATES

Your education policy team.

| State | Minimum salary requirement ²⁷ | Salary schedule ²⁸ | Diversified pay (high-needs schools and/or shortage subject areas) ²⁹ | Pay-for-performance (salaries or bonuses) ³⁰ |
|----------------|--|-------------------------------|--|---|
| Maine | X | | | |
| Maryland | | | X ³³ | |
| Massachusetts | X | | | |
| Michigan | | | | X |
| Minnesota | | | | X |
| Mississippi | | X | | X |
| Missouri | X | | | |
| Montana | | | | |
| Nebraska | | | | |
| Nevada | | | X | X |
| New Hampshire | | | | |
| New Jersey | X | | | |
| New Mexico | X | | X | |
| New York | | | X | |
| North Carolina | | X | | |
| North Dakota | | | | |
| Ohio | | X | X | X |
| Oklahoma | | X | X | X |
| Oregon | | | | |
| Pennsylvania | | | | |
| Rhode Island | | | | |
| South Carolina | | X | | X |
| South Dakota | | | | |
| Tennessee | | X | X | X ³⁴ |



| State | Minimum salary requirement ²⁷ | Salary schedule ²⁸ | Diversified pay (high-needs schools and/or shortage subject areas) ²⁹ | Pay-for-performance (salaries or bonuses) ³⁰ |
|---------------|--|-------------------------------|--|---|
| Texas | | X | X | |
| Utah | | | X | X |
| Vermont | | | | |
| Virginia | | | X | |
| Washington | | X | X | |
| West Virginia | | X | X | |
| Wisconsin | | | X | |
| Wyoming | | | X | |
| TOTAL | 7 | 17 | 23 | 16 |



Endnotes

1. OECD, Education at a Glance 2015: OECD Indicators, (Paris: OECD Publishing, 2015), 7, http://www.keepeek.com/Digital-Asset-Management/oecd/education/education-at-a-glance-2015/united-states_eag-2015-86-en#page7 (accessed March 21, 2016).
2. Alyssa Auck and Hunter Railey, 2016 State of the State Addresses: Governors' Top Education Issues (Denver: Education Commission of the States, 2016), 2, <http://www.ecs.org/ec-content/uploads/03012016-State-of-the-States-Addresses.pdf> (accessed March 21, 2016).
3. Illinois teacher salary schedule has not been updated since 1980. Because of this the amounts in the state's schedule no longer have relevance. For example, under the state's salary schedule a starting teacher with a bachelor's degree would receive a salary of at least \$10,000. Idaho's teacher salary schedule only increases teacher salaries for the first ten years of a teachers experience - after the tenth year teacher salaries are capped. Michael Griffith, State Teacher Salary Schedules (Denver: Education Commission of the States, 2016), 3, <http://www.ecs.org/ec-content/uploads/State-Teacher-Salary-Schedules-1.pdf> (accessed March 21, 2016); National Council on Teacher Quality, 2015 State Teacher Policy Yearbook National Summary (Washington, DC: National Council on Teacher Quality, 2015), 112, http://www.nctq.org/dmsView/2015_State_Teacher_Policy_Yearbook_National_Summary_NCTQ_Report (accessed April 5, 2016).
4. Ibid.
5. Twenty-two states offer diversified pay for high-needs schools and 15 states offer diversified pay for shortage subject areas. Ibid., National Council on Teacher Quality, 118.
6. Ibid., National Council on Teacher Quality, 114.
7. National Council on Teacher Quality, State of the States: Evaluating Teaching, Leading and Learning (Washington, DC: National Council on Teacher Quality, 2015), 33, <http://www.nctq.org/dmsView/StateofStates2015> (accessed April 5, 2016).
8. Dan Goldhaber et. al., Returns to Skill and Teacher Wage Premiums: What Can we Learn by Comparing the Teacher and Private Sector Labor Markets? (Seattle: Center on Reinventing Public Education, 2008), <http://www.crpe.org/publications/returns-skill-and-teacher-wage-premiums-what-can-we-learn-comparing-teacher-and-private> (accessed March 21, 2016); Byran Auguste, Closing the Talent Gap: Attracting and Retaining Top-Third Graduates to Careers in Teaching (Washington, D.C.: McKinsey & Company, 2010), http://mckinseysociety.com/downloads/reports/Education/Closing_the_talent_gap.pdf (accessed March 21, 2016).
9. Richard Ingersoll, "Teacher Turnover and Teacher Shortages: An Organizational Analysis," American Educational Research Journal vol. 38, no. 3 (2001), http://repository.upenn.edu/cgi/viewcontent.cgi?article=1093&context=gse_pubs (accessed April 5, 2016).
10. Ibid., Michael Griffith, 3; TNTP, Shortchanged The Hidden Costs of Lockstep Teacher Pay (Brooklyn: TNTP, 2014), 2, http://tntp.org/assets/documents/TNTP_Shortchanged_2014.pdf (accessed March 21, 2016).
11. Ibid., Michael Griffith, 3.
12. TNTP, The Irreplaceables: Understanding the Real Retention Crisis in America's Urban Schools (Brooklyn: TNTP, 2012), 30, http://tntp.org/assets/documents/TNTP_Irreplaceables_2012.pdf (accessed April 6, 2016); Ibid., National Council on Teacher Quality, 2015 State Teacher Policy Yearbook National Summary, 112.
13. Kimberly Raue and Lucinda Gray, Career Paths of Beginning Public School Teachers (Washington, D.C.: National Center for Education Statistics, 2015), 18, https://secure.aacte.org/apps/rl/res_get.php?fid=2234&ref=rl (accessed April 5, 2016).
14. Hanover Research, Review of Teacher Incentive Programs (Arlington: Hanover Research, 2014), 10, <http://www.cresa.net/wp-content/uploads/2014/12/Review-of-Teacher-Incentive-Programs-1.pdf> (accessed April 5, 2016).
15. Ibid., Hanover Research, 10; Steven Glazerman, et al., Transfer Incentives for High-Performing Teachers: Final Results from a Multisite Randomized Experiment - Executive Summary (Washington, D.C.: Institute of Educational Sciences, 2013), ES -1, <https://ies.ed.gov/ncee/pubs/20144003/pdf/20144004.pdf> (accessed April 5, 2016).
16. Mac Taylor, The 2016-17 Budget: Proposition 98 Education Analysis (Sacramento: California Legislative



- Analyst's Office, 2016), 69, <http://www.lao.ca.gov/Reports/2016/3355/prop-98-analysis-021816.pdf> (accessed April 6, 2016); Li Feng and Tim Sass, The Impact of Incentives to Recruit and Retain Teachers in "Hard-to-Staff" Subjects: An Analysis on the Florida Critical Teacher Shortage Program (Washington, D.C.: CALDER, American Institutes for Research, 2015), <http://www.caldercenter.org/sites/default/files/WP%20141.pdf> (accessed April 6, 2016).
17. Ibid., Hanover Research, 3.
 18. Education Commission of the States, More on Pay-for-Performance (Denver: Education Commission of the States, 2015), 3, <http://www.ecs.org/clearinghouse/97/02/9702.pdf> (accessed April 6, 2016).
 19. Ibid., 4; District of Columbia Public Schools, How the DC Public Schools Changed Everything to Get, Grow and Keep Great Teachers and Principals (Washington, D.C.: District of Columbia Public Schools, 2016) [http://dcps.dc.gov/sites/default/files/dc/sites/dcps/page_content/attachments/DCPSWeThePeople.pdf?utm_source=Subscriber%3A+NCTQ+monthly+e-letter+and+updates&utm_campaign=08f0557024-TQB_02_16_2016&utm_medium=email&utm_term=0_7973772675-08f0557024-409040177&ct=t\(TQB_02_16_2016](http://dcps.dc.gov/sites/default/files/dc/sites/dcps/page_content/attachments/DCPSWeThePeople.pdf?utm_source=Subscriber%3A+NCTQ+monthly+e-letter+and+updates&utm_campaign=08f0557024-TQB_02_16_2016&utm_medium=email&utm_term=0_7973772675-08f0557024-409040177&ct=t(TQB_02_16_2016) (accessed April 6, 2016); Iowa Department of Education, End-of-Year Report Summary (Des Moines: Iowa Department of Education, 2015) <https://www.educateiowa.gov/sites/files/ed/documents/2014-2015TLCSystemEndOfYearReport.pdf> (accessed April 6, 2016).
 20. Ibid., District of Columbia Public Schools.
 21. Laura Pomerance and Kate Walsh, "Pay Attention Everybody, D.C.'s on a Roll," TQB Monthly, 2016, <http://www.nctq.org/commentary/article.do?id=238> (accessed April 6, 2015); Melinda Adnot, et al., "Teacher Turnover, Teacher Quality, and Student Achievement in DCPS," NBER Working Paper, 2016, Abstract, <http://www.nber.org/papers/w21922> (accessed April 6, 2016).
 22. Public School Forum of North Carolina, A Legacy of Inspired Educators: A Report on the North Carolina Teaching Fellows Program 1986-2015 (Raleigh: Public School Forum of North Carolina, 2013), Executive Summary, https://www.ncforum.org/wp-content/uploads/2013/05/PSF_TeachingFellowsReport_WEB.pdf (accessed April 6, 2016).
 23. Gary Henry, "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, vol. 41, no. 3 (2012): 90, <http://edr.sagepub.com/content/41/3/83.short> (accessed April 6, 2016).
 24. Iowa House File 215, 2013; 40.
 25. Ibid., Iowa Department of Education, 3, 9.
 26. Iowa Department of Education, Guidance on the Iowa Teacher Leadership and Compensation System (Des Moines: Iowa Department of Education, 2013) <https://www.educateiowa.gov/sites/files/ed/documents/2013-07-15GuidanceOnTheTLCSystem.pdf> (accessed April 6, 2016).
 27. Ibid., National Council on Teacher Quality, 2015 State Teacher Policy Yearbook National Summary, 112.
 28. Ibid., Michael Griffith.
 29. Twenty-two states offer diversified pay for high-needs schools and 15 states offer diversified pay for shortage subject areas. Ibid., National Council on Teacher Quality, 2015 State Teacher Policy Yearbook National Summary, 118.
 30. Ibid., 114.
 31. Illinois teacher salary schedule has not been updated since 1980. Because of this the amounts in the state's schedule no longer have relevance. For example, under the state's salary schedule a starting teacher with a bachelor's degree would receive a salary of at least \$10,000. Idaho's teacher salary schedule only increases teacher salaries for the first ten years of a teachers experience - after the tenth year teacher salaries are capped.
 32. Ibid.
 33. "Maryland offers tuition reimbursement for teacher retraining in specified shortage subject areas and offers a stipend for alternate route candidates teaching in shortage subject areas." Ibid., National Council on Teacher Quality, 2015 State Teacher Policy Yearbook National Summary, 118.
 34. Tennessee does not require a performance component. "Districts must differentiate teacher compensation based on at least one of the following criteria: additional roles or responsibilities, hard-to-staff schools or subject areas, and performance based on teacher evaluations." Ibid., 114.



AUTHOR

Stephanie Aragon is a policy researcher at the Education Commission of the States. In her free time, Stephanie keeps busy training for her first ever mini triathlon and trying to keep up with her always active, ever-changing son Elijah. Contact Stephanie at saragon@ecs.org or 303.299.3614.



