

RESTRUCTURING TEACHER PAY TO REWARD EXCELLENCE

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National Council on Teacher Quality

AS PAINFUL AS THE RECESSION HAS BEEN ON SCHOOL DISTRICTS, IT PROVIDES A USEFUL OPPORTUNITY TO REEXAMINE HOW MONEY IS SPENT.

When negotiating new teacher contracts, most districts, no doubt, are focusing discussions on averting wage freezes and massive layoffs. But prudent districts—those looking for long-term solutions to budget problems as well as those seeking to more fairly compensate the most effective teachers—are reconsidering the traditional salary schedule, which rewards teachers for years of experience and graduate credits.

More than a half century ago, districts developed teacher salary schedules, embedding the incentives for both experience and education as a response to real inequities in pay. Previously, higher salaries had been reserved for principals' favorites, high school teachers rather than their elementary counterparts and males instead of females. But today, one can make the case that the current approach to teacher compensation has outlived its usefulness. For example, accountability systems discourage principals from making salary choices that are not in a school's best interest and anti-discrimination laws protect teachers against unjust compensation decisions.

Most significantly, the salary schedule, as currently defined, does not consider teacher effectiveness, making it inherently unfair to talented teachers. It has also led to “wage compression,” meaning that teachers with the most aptitude earn no more than teachers with the lowest aptitude, rendering teaching an unattractive career choice for talented college graduates.¹

IN THIS PAPER, THE NATIONAL COUNCIL ON TEACHER QUALITY (NCTQ) ARGUES FOR WHOLESAL INNOVATIONS IN TEACHER COMPENSATION.

We make the case that truly effective teacher pay reform is best achieved by aligning compensation with a district's primary needs: improving student achievement and placing the best teachers where they are needed most.

To study this issue in detail, NCTQ drew upon its TR³ database, which contains teacher contracts, school board policies and state laws governing the teaching profession in over 100 large school districts.² We also present additional data sampled from 13 large public school districts.³

¹ Hoxby, C., & Leigh, A. (Spring 2005). Wage distortion: Why America's top female college graduates aren't teaching. *Education Next*. 51-56

² Among the 100 plus districts are the nation's 75 largest as well as the largest district in each of the 25 states that would not otherwise be represented if size were the only consideration.

³ Most were randomly selected because they provide a good geographic representation of the country. Four of these 13 districts (Baltimore, Boston, Hartford and Seattle) are included because NCTQ conducted studies of these cities and had ready access to the necessary payroll data.

Figure 1. **A typical salary schedule in the United States**

Step	Provisional	BA	BA + 30 credits	BA + 45 credits, MA	MA + 30 credits	MA + 60 credits	Doctorate
1	38,691	43,481	45,524	47,663	49,901	52,248	52,768
2	38,691	43,481	45,524	47,663	49,901	52,248	52,768
3	39,832	44,762	46,868	49,068	51,373	53,789	54,327
4	41,008	46,081	48,250	50,517	52,892	55,375	55,928
5	42,217	47,442	49,672	52,005	54,453	57,009	57,578
6	43,462	48,841	51,137	53,538	56,056	58,690	59,277
7	44,745	50,281	52,646	55,120	57,710	60,422	61,025
8	46,066	51,766	54,200	56,744	59,414	62,203	62,826
9	47,424	53,292	55,800	58,418	61,166	64,037	64,679
10	48,823	54,863	57,446	60,143	62,971	65,927	66,587
11	50,261	56,482	59,139	61,917	64,827	67,871	68,550
12	51,746	58,148	60,883	63,743	66,741	69,874	70,574
13	-	-	62,682	65,624	68,709	71,934	72,653
14	-	-	64,531	67,561	70,735	74,055	74,797
15	-	-	66,432	69,554	72,824	76,242	77,003
16	-	-	68,393	71,605	74,971	78,492	79,276
17	-	-	70,410	73,718	77,180	80,807	81,614
18	-	-	72,487	75,893	79,458	83,190	84,022
19	-	-	74,627	78,131	81,800	85,645	86,501
20	-	-	76,826	80,436	84,215	88,171	89,054

BA - Bachelor's degree
MA - Master's degree

Source: Chicago Public Schools, 2006-2007.

In this example, columns represent educational attainment and rows represent additional years on the job. Teachers are awarded annual raises for each additional year of experience. Teachers can also earn raises for taking coursework well beyond a master's degree, in this case effectively three degrees (MA + 60 credits). In addition to raises for each additional year of experience, teachers receive cost of living adjustments (COLA), often a fixed percentage—though it can vary across steps and lanes in some districts—across all salaries applied annually. COLAs vary from year to year as well as among districts.

Performance pay the smart way

Increasingly, districts are experimenting with teacher compensation structure, with a third of the 100 plus districts in the TR³ database reporting the use of a performance pay plan in the 2009-2010 school year. However, almost all of these plans are layered on top of the traditional salary schedule. Most systems are unable to offer meaningful bonuses unless they seek outside funds. It's no surprise, then, that the average performance pay bonus of districts in the TR³ database is only \$2,300, virtually the same amount as the stipend paid to a teacher who agrees to coach a sport or chair a school club.

A few districts have sought outside funding as a means to offer more substantial bonuses to teachers. The new D.C. performance pay program, for example, relies on \$65 million in outside funds from private foundations.

But private funding is not always necessary to fund meaningful bonuses, if districts restructure how they compensate teachers. The recently negotiated contract in Baltimore is a great example of this approach.

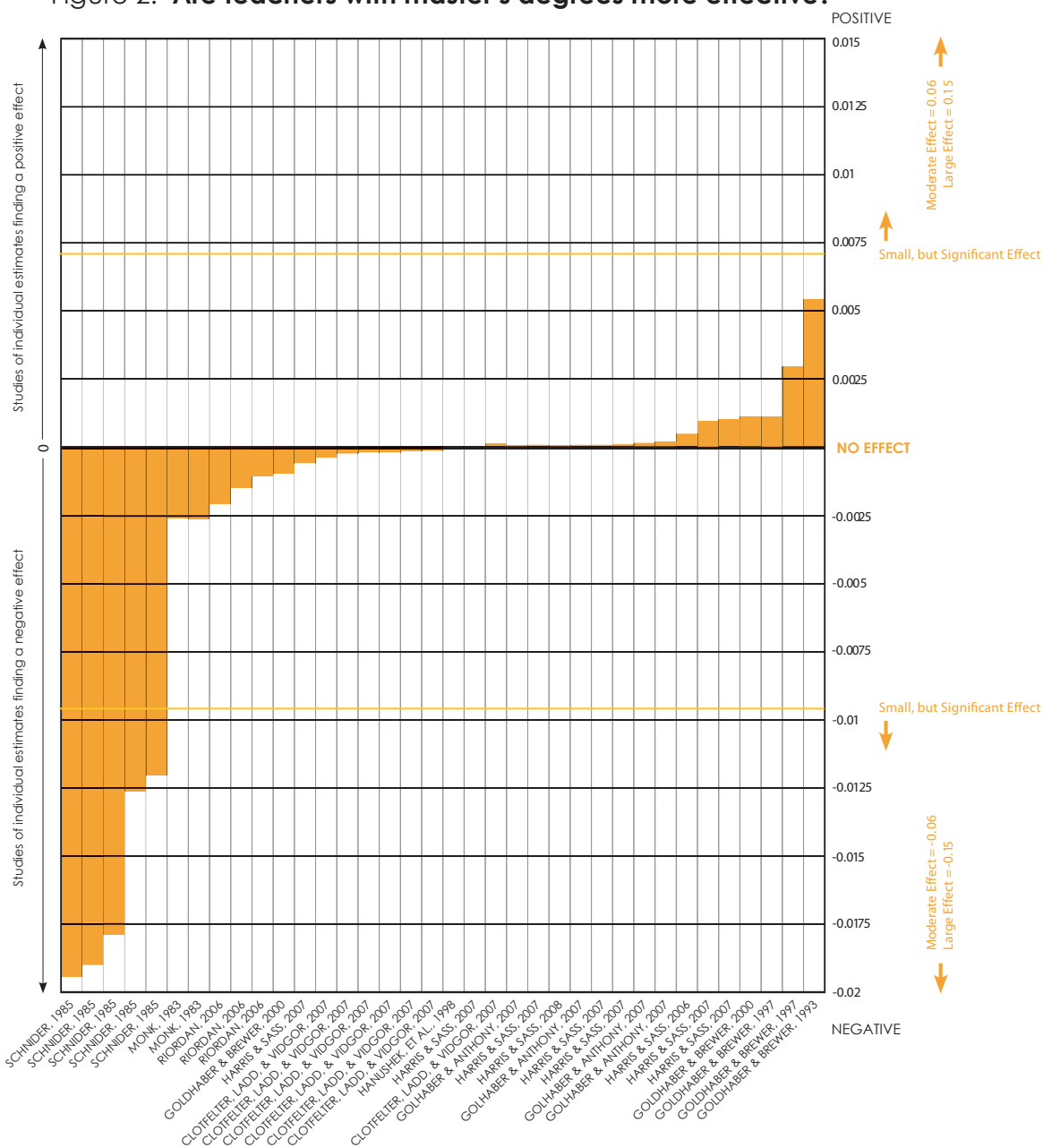
Baltimore's new pay system eliminates automatic raises for experience and reconsiders the weight given to coursework completion. Raises in the new structure are largely based on teacher performance. Additionally, teachers can advance on a career ladder based on their contributions to their school.

PART 1: THE DEGREE FACTOR: PAYING TEACHERS MORE FOR POST-BACCALAUREATE COURSEWORK

A considerable body of research has explored the relationship between advanced levels of education for teachers—coursework and degrees beyond a bachelor’s degree—and the academic achievement of students. To summarize those findings, NCTQ commissioned a meta-analysis of all teacher education studies since 1993, the vast majority of which have been published in peer-reviewed journals. The studies used students’ standardized test scores as the measure of student growth in the core subjects of math, science and reading.

Out of 102 statistical tests examined, approximately 90 percent showed that advanced degrees had either no impact at all or, in some cases, a negative impact on student achievement. Of the 10 percent that had a positive impact, none reached a level of statistical significance. In fact, a good number of the studies found a significant negative correlation between teachers’ degree status and student achievement.

Figure 2. Are teachers with master’s degrees more effective?



Why doesn't more education make a difference? It may be because school districts often respond to state requirements that routinely boost a teacher's pay for any advanced degree, regardless of the content, relevance or quality of the coursework it entails. For example, few teachers pursue post-baccalaureate degrees that will advance their subject-matter knowledge. Nationally, even at the secondary level, fewer than one in four post baccalaureate degrees is in the teacher's content area. At the elementary level, only a small fraction (7 percent) is in any content area relating to elementary teaching.⁴ However, more than half of all public school teachers now hold a master's degree, a figure that has more than doubled in the past 30 years.⁵

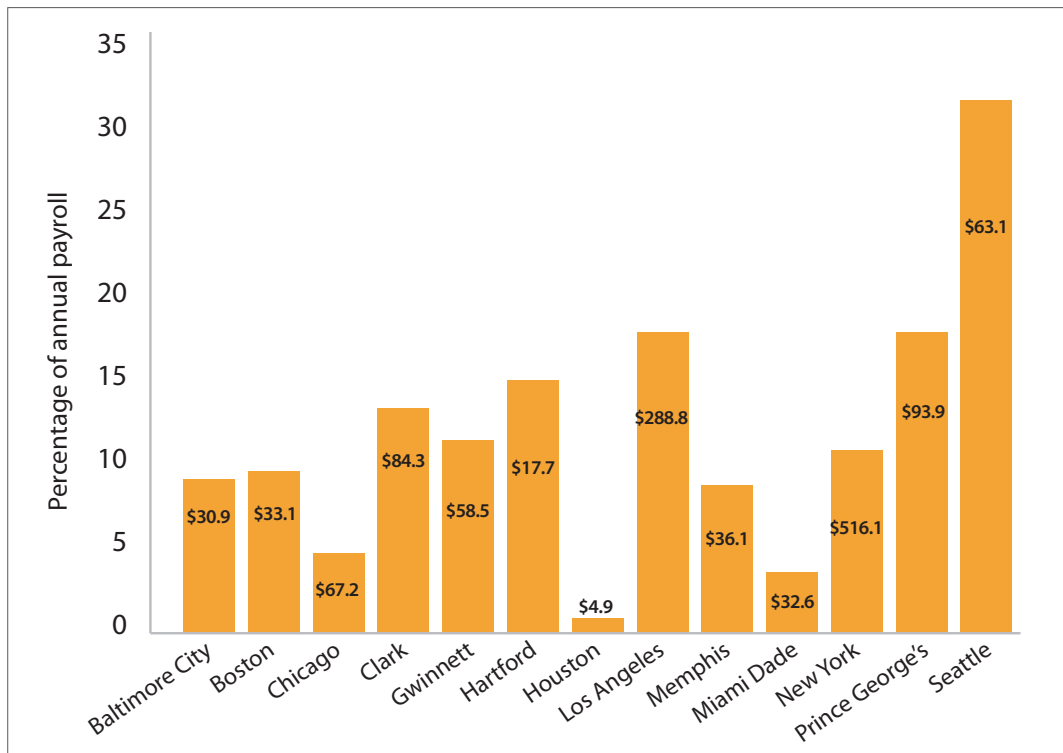
Figure 3. **Characteristics of U.S. public school teachers 1971-2001**

CHARACTERISTICS	1971	1981	1991	2001
Median age (in years)	35	37	42	46
% with master's/specialist degree	27.1	49.3	52.6	56
Median years teaching experience	8	12	15	14

Source: National Center for Education Statistics, U.S. Department of Education (IES)

On average, districts award 11 percent more pay to teachers who have completed a master's degree. This differential increases even more for teachers who complete coursework beyond a master's degree. A 2009 study using data from the U.S. Schools and Staffing Survey and the National Education Association's salary survey calculates that the funds spent across the 50 states for the "master's bump" tally more than \$8.6 billion a year.⁶

Figure 4. **Sample district expenditures on degree-based compensation (in millions)**



Source: NCTQ analysis based on payroll expenditures in select school districts.

⁴ National Center for Education Statistics (2002). *The condition of education 2002*. Washington, D.C.: U.S. Department of Education, Table 32-2.

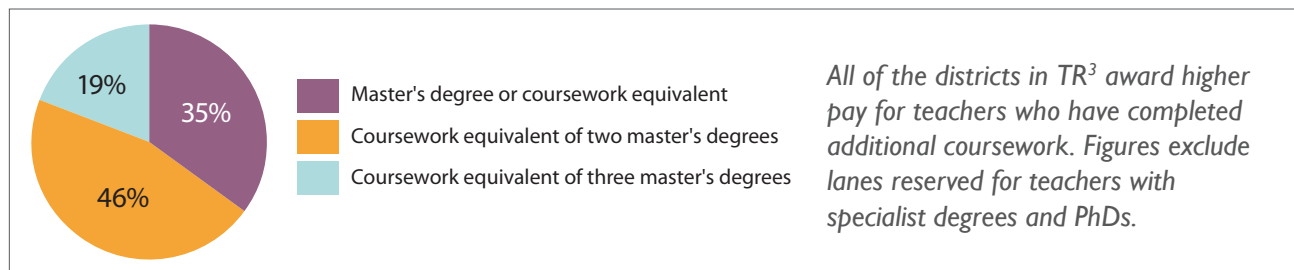
⁵ Figures available from the U.S. Department of Education at http://nces.ed.gov/programs/digest/d07/tables/dt07_066.asp

⁶ See: http://www.americanprogress.org/issues/2009/07/separation_of_degrees.html

Districts not only pay higher salaries to teachers who earn advanced degrees, but they also pay higher salaries to teachers who have simply taken additional graduate credits, even if those credits are not associated with a degree. **Clark County, Nevada**, for example, provides two salary tracks between the bachelor's and master's salary levels: bachelor's plus 16 credits (BA +16) and bachelor's plus 32 credits (BA +32). In fact, it is not uncommon for a district's salary schedule to require teachers to take the coursework equivalent of three master's degrees to earn the highest salary.

In addition, many districts effectively penalize those teachers who choose not to earn graduate credits. A quarter of the districts in TR³ limit the number of annual raises for which teachers with only a bachelor's degree can qualify, often capping their salaries years before those of teachers holding master's degrees. For example, teachers in **Prince George's County Public Schools (MD)** who have a bachelor's degree reach their highest pay in 12 years (with a salary of \$55,379), while colleagues with a master's degree continue receiving salary increases for an additional eight years, reaching a maximum salary of \$76,606.⁷ Most teachers in PG County ultimately complete a master's degree to complete state license requirements.

Figure 5. **Coursework required to qualify for the highest salary in a district**



Source: www.nctq.org/tr3

How states force district hands

State licensure and salary requirements play a large role in determining the amount of money districts devote to degree-based compensation. Seventeen states set a salary schedule requiring that districts pay more to teachers who have earned an advanced degree. Five states go so far as to require that teachers have a master's degree in order to obtain permanent licensure and 23 states mandate that teachers complete general coursework without specifying that it must be related to the subject matter taught. In both cases, an expenditure of time and effort, as well as private and public resources, contribute little to improving teachers' content knowledge or skills in teaching subject matter.⁸

Figure 6. **State degree requirements for professional licensure**

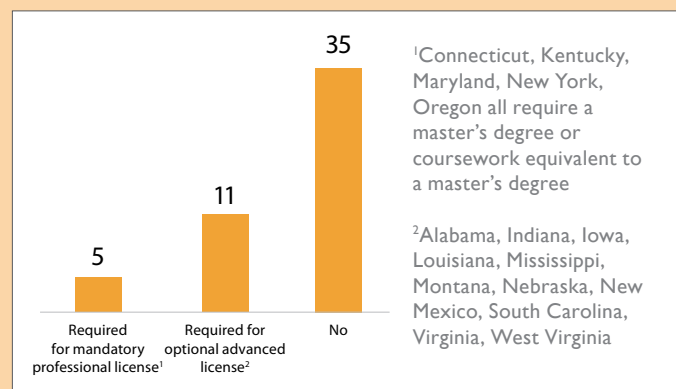
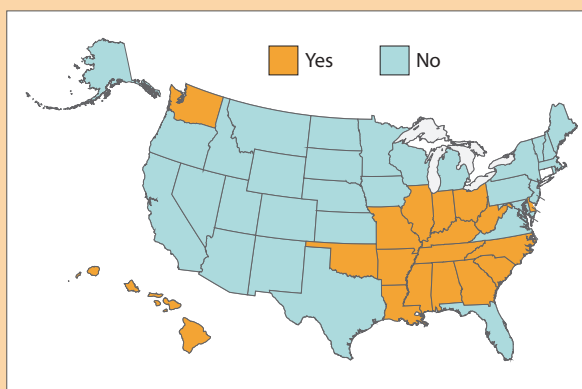


Figure 7. **States that require districts to pay more to teachers with advanced degrees**



Source: 2009 state teacher policy yearbook, National Council on Teacher Quality

⁷2007-2008 teacher salary schedule.

⁸In contrast, only 15 states require any evidence of teacher effectiveness, and only one state requires this evidence to be the preponderant criterion for teachers to earn professional licenses. See NCTQ *State Policy Teacher Yearbook 2009* at www.nctq.org.

PART 2: THE EXPERIENCE FACTOR: PAYING TEACHERS MORE FOR LONGEVITY

Professionals in just about every line of work are rewarded for longevity and are paid, at least in part, based on seniority. Districts understandably wish to reward teachers for their loyalty and commitment. However, many school districts, in a misguided effort to retain teachers, save the largest raises for teachers approaching the ends of their careers, essentially *back-loading* salaries to the years just before retirement.

Research on the relationship between experience and effectiveness tells us that teachers become effective relatively early in their careers. The most growth takes place during the first three years in the classroom, leveling off soon thereafter.⁹

Nonetheless, nearly a third of the TR³ districts pay veteran teachers raises that are *at least* twice what novice teachers receive. In these districts, novice teachers see average annual salary increases of just \$556 while veteran teachers receive yearly raises averaging \$2,614, averaging five times that of beginning teachers.

How the teacher pay structure compares to other professions

A lawyer can expect to reach his highest salary level (excluding a few years of extra-high earnings toward the end of his career) around the age of 35, a doctor around the age of 40. In contrast, a teacher will not reach her maximum earnings until the age of 55.¹⁰ Teachers who have more experience are no doubt more efficient and can add tremendous benefits to the school at large, but the impact of experience on performance is not so distinct.

In districts that reserve significant raises for teachers with the most experience, earnings growth is nearly nonexistent during the early part of a teacher's career. This strategy does not serve the profession well. It directs a disproportionate share of the resources to veteran teachers who have the promise of a pension in their near future to keep them in the classroom. Meanwhile, novice teachers have little incentive to stay in a system that makes them wait years before earning a viable salary. And even if they stay in the profession, they have little incentive to stay in their current district as there will be no significant financial loss by transferring elsewhere.

In addition to reserving the largest raises for teachers near the end of their careers, many districts also award longevity bonuses. These are distributed after annual raises already provided for on the salary schedule end. For example, Boston awards teachers bonuses every five years after teachers "max out" on the highest step of the salary schedule. While districts frame these longevity bonuses as a retention strategy, it would be more strategic to award such bonuses at the tenure mark, generally after teachers spend three or four years in the classroom.

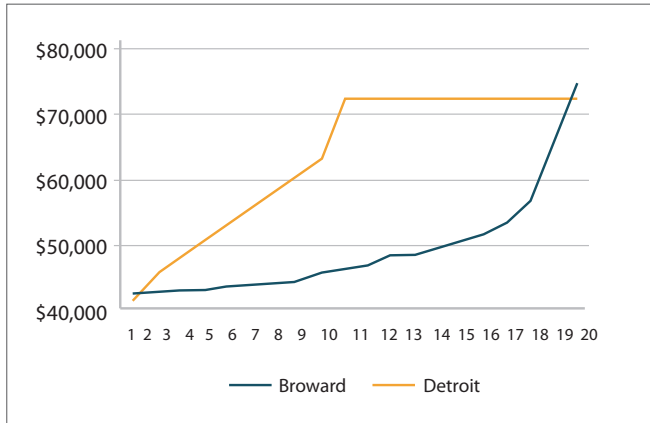
To illustrate just how important the timing of teacher raises is to lifetime earnings, we pair districts that have comparable starting and maximum salaries but much different salary structures. Teachers in districts that withhold raises until later in their career earn significantly less than peers in districts who pay teachers more early on in their careers.

⁹D. Goldhaber and M. Hansen, *Assessing the Potential of Using Value-Added Estimates of Teacher Job Performance for Making Tenure Decisions* (Cambridge, MA: National Bureau of Economic Research, 2009).

¹⁰Vigdor, J. (2008, Fall). Scrap the sacrosanct salary schedule. *Education Next*, 37-42.

Figure 8-10 **Contrasting examples of longevity raises and their impact on lifetime earnings**

Figure 8



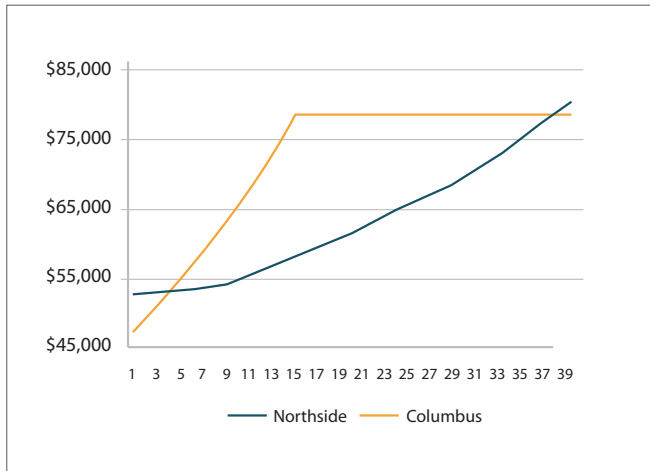
Teachers in Detroit earn 15 percent more than teachers in Broward over a 30 year career. (\$1.99 million compared to \$1.73 million in Detroit).

Figure 9



Teachers in Boston earn eight percent more than teachers in Pittsburgh over a 30 year career. (\$2.23 million compared to \$2.06 million in Pittsburgh).

Figure 10



Teachers in Columbus earn 20 percent more than teachers in Northside over a 30 year career. (\$1.95 million compared to \$1.63 million in Columbus).

Despite comparable starting and ending salaries, teachers in Detroit, Boston and Columbus earn significantly more during their careers than teachers in Broward, Pittsburgh and Northside because they do not have to wait until the end of their careers to receive a competitive salary.

CONCLUSION AND RECOMMENDATIONS

There's good news here. Districts and states are eager to compensate teachers for their effectiveness. There is currently more political will for these sorts of reforms than there has been in recent memory. The challenge is how to fund such bonuses. Even states with Race to the Top money or other federal grants will not have enough funding to implement meaningful bonuses. Unless localities raise taxes to find bonuses, districts will have to draw upon their own resources. The data presented in this paper demonstrate how districts can begin to implement a new pay structure for teachers, absent an influx of outside funding.

Recommendations for districts

1. Redistribute pay differentials currently dedicated to master's coursework. These funds could be used instead to provide younger teachers with higher pay raises and award meaningful bonuses to highly effective teachers and teachers in high-needs schools and subject areas, such as math and science. Such strategies would help make the profession more attractive to high-quality applicants.

2. Award the most significant raises at the tenure mark. Not only is withholding the largest raises for teachers with copious amounts of experience an ineffective retention strategy, but it is inconsistent with research on teacher effectiveness. Such a structure could be used to incentivize teachers to stay in the classroom during the period when there is the highest turnover.

3. Compact the salary schedule; teachers should reach their highest salary earlier in their career. A shorter salary schedule enables teachers to reach their maximum pay sooner. It also provides an incentive for mid-career professionals to stay in the classroom, as their lifetime earnings potential would be higher in districts where maximum pay is reached in 15 years as opposed to 25.

Recommendation for states

Eliminate state regulations requiring master's degrees and other non-specific graduate coursework requirements for obtaining permanent and advanced licensure status. The most common requirement for permanent licensure is completion of additional coursework, often leading to a master's degree. Requiring teachers to get additional training in their teaching area certainly has the potential to be meaningful. However, these requirements are usually vague, allowing teachers to fulfill coursework requirements with little consideration for relevance to instruction. In circumstances where more coursework should improve a teacher's performance, the reward should be directed at improved results in the classroom, not the coursework itself.

National Council on Teacher Quality
1420 New York Avenue, Suite 800
Washington, DC 20005

T 202.393.0020 F 202.393.0095

www.nctq.org