Ladders of Success: Keeping Teacher Pay on Schedule

by **Chad Aldeman**

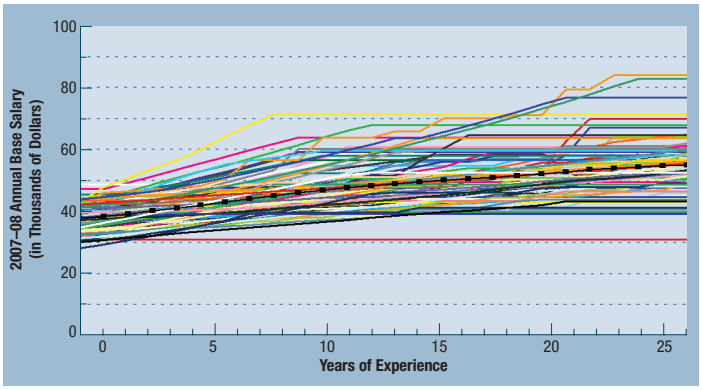
April 21, 2009

When the National Education Association, the nation's largest teachers union, held their annual meeting in 2008, candidate Barack Obama advocated changing the teacher compensation structure from the traditional "single salary schedule"—based only on years of experience and academic credentials—to one reflecting a teacher's performance in the classroom. But Obama's mention of pay for performance elicited boos from the crowd. And similar proposals to restructure teacher pay schemes have created controversy in cities like Washington, D.C., fueled by disagreements over a reliable means to measure an individual teacher's performance and the fact that many teachers teach subjects that are not measurable by standardized tests or other objective instruments. Teacher pay should be more closely tied to an individual teacher's effectiveness in the classroom than it is today, and pay for performance can be one way to achieve that goal. But policymakers also have another option: changing the *way* compensation is tied to experience and credentials.

Not all single salary schedules are the same. Some are much better than others in reflecting what research tells us about how teachers gain effectiveness over the life of a career. Research shows that teachers have steep learning curves—they become much more effective in their first few years on the job and then level off.[1] And a great deal of research shows the link between teacher effectiveness and educational credentials to be minor or nonexistent.[2] A district designing their salary structure based on these findings can more effectively attract and reward high-quality teachers without increasing the overall amount of money spent on compensation.

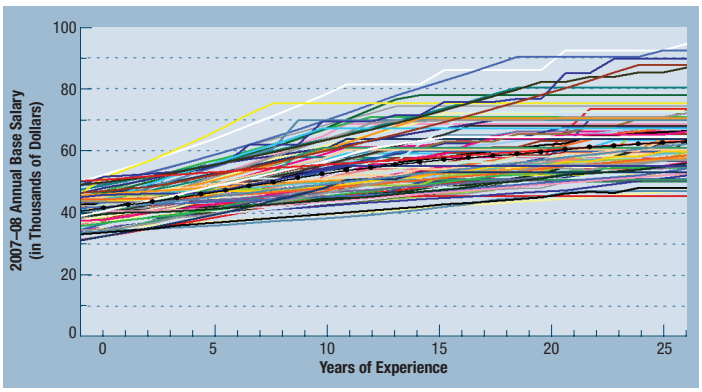
Examples from some of the nation's biggest school districts show just how different single salary schedules can be. The National Council on Teacher Quality (NCTQ) has compiled 2007–08 teacher salary data for 89 school districts representing 45 states. Collectively, the districts employ about 20 percent of the nation's teachers and educate 20 percent of the nation's K–12 students. As **Charts 1 and 2** show, there is great variation—no two districts are alike. Starting salaries for teachers with bachelor's degrees range from roughly $30,000 to $50,000, a difference of about $20,000. And for teachers with 25 years of experience, the range between the highest- and lowest-paying districts is more than twice as large, at $50,000.

Chart 1. Salaries of Fully Certified Teachers With Bachelor's Degrees



Source: Data were downloaded from the National Council on Teacher Quality's Teacher Rules, Roles, and Rights, available online at http://www.nctq.org/tr3/.

Chart 2. Salaries of Fully Certified Teachers With Master's Degrees



Source: Data were downloaded from the National Council on Teacher Quality's Teacher Rules, Roles, and Rights, available online at http://www.nctq.org/tr3/.

All the districts in the NCTQ sample, however, reward additional educational credentials with higher salaries, despite little evidence that students learn more when taught by teachers with advanced degrees. The average starting salaries for teachers with bachelor's and master's degrees are only $2,880 apart, but the gap widens as teachers gain experience. It nearly triples in value for teachers with 25 years of experience, making the average master's degree in these 89 districts worth more than $150,000 over a 25-year career, in today's dollars. This sum is on top of financial assistance many districts offer to teachers pursuing further education.

Yet, the way districts reward credentials varies widely. **Chart 3** compares the salary schedules for teachers with bachelor's and master's degrees in Omaha, Neb., to Santa Ana, Calif.

Some districts, like Omaha, have one salary structure for all teachers that ties annual pay to experience and provides a standard bonus for academic credentials. Others, like Santa Ana, have completely different schedules for teachers with bachelor's and master's degrees. Of the districts in the sample, Santa Ana pays the highest starting salary for teachers with bachelor's degrees. But a teacher with only a bachelor's degree is capped at that level for the life of her career. Teachers with master's degrees in Santa Ana, on the other hand, are paid well at both the beginning and end of their careers. Their salary starts high at $50,159 (second highest of all the districts) and increases rapidly before peaking at almost $95,000 a year, the highest of all the districts.

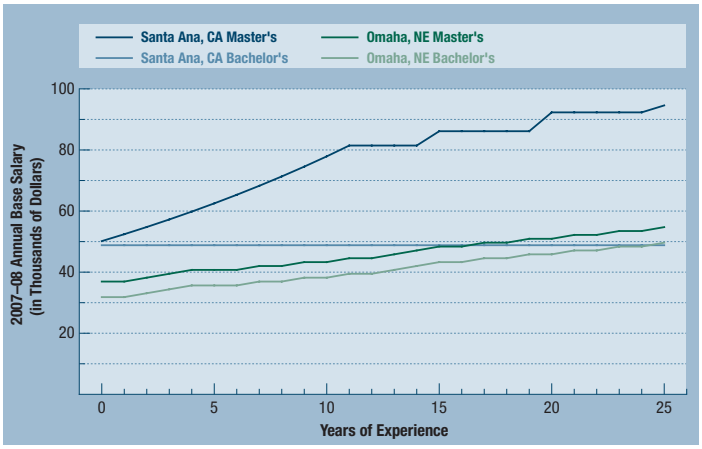
Beyond the variation in starting and ending salaries, the *slope* of teacher salary schedules is likely to have a significant impact on the quality and character of the teacher work force in any given district. Higher starting salaries are more likely to attract high-quality candidates into the profession. A district with only small returns for experience is likely to face retention issues as teachers leave for more lucrative positions or grow frustrated because their pay increases aren't commensurate with their increasing effectiveness in the classroom. Some district salary schedules have large "stair steps" where salaries increase dramatically when teachers reach a certain milestone, such as 20 years of service. Such policies are likely to distort teacher decision-making, giving teachers too little reason to stay when they are far from the "step" and too much reason to stay when they are near. Each of these decisions helps shape a district's teacher work force by influencing its ability to attract and retain quality teachers.

Chart 4 shows a selection of five districts using their salary structures in very different ways.

In Tucson, Ariz., the return for experience is steady but slight, with teachers getting small, nearly identical raises every year. Its salary structure looks like a low, flat line. Prince William County, Va., also provides consistent annual raises for experience, but it is more generous, with the salary line sloping steeply upward to almost $90,000 for those with 25 years of experience. Neither of these districts is more or less likely to lose teachers at one particular stage of their careers.

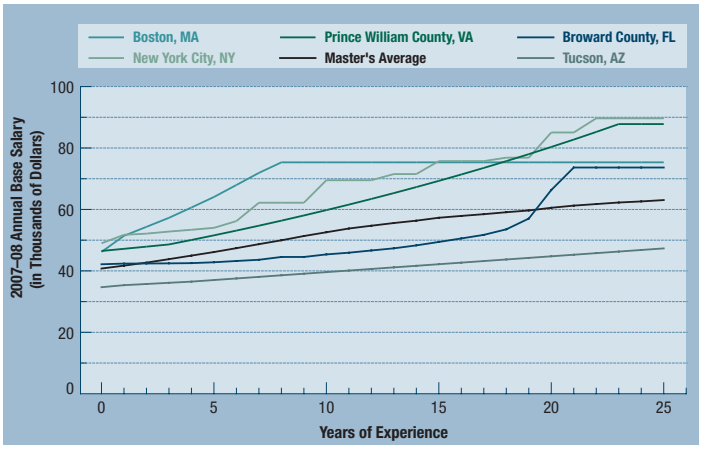
Other districts vary the reward for experience by stages of a teacher's career. Teachers in Boston, Mass., earn relatively steep increases each year on the job at the beginning of their careers, only to plateau after eight years of experience—an approach consistent with research showing that teachers become much more effective in their first few years on the job. Boston has structured its salary schedule to maximize its ability to recruit incoming teachers and retain them during their first years on the job, the period when teachers are most likely to leave the profession.

Chart 3. Difference Between Salaries of Teachers With Bachelor's and Master's Degrees



Source: Data were downloaded from the National Council on Teacher Quality's Teacher Rules, Roles, and Rights, available online at http://www.nctq.org/tr3/.

Chart 4. Salaries of Fully Certified Teachers With Master's Degrees—Varied Slopes



Source: Data were downloaded from the National Council on Teacher Quality's Teacher Rules, Roles, and Rights, available online at http://www.nctq.org/tr3/.

Unlike Boston's plateau, New York City's teacher salary structure is noteworthy for its large stair steps. It rewards teachers with large raises when they meet certain experience milestones (seven, 10, 15, 20, and 22 years) and smaller or nonexistent raises in other years. Large step increases create incentives for teachers to hang on until they reach the next one—a teacher in New York is unlikely to leave after 19 years, for example, because they stand to earn an 11 percent raise, more than $8,000, if they stay one additional year.

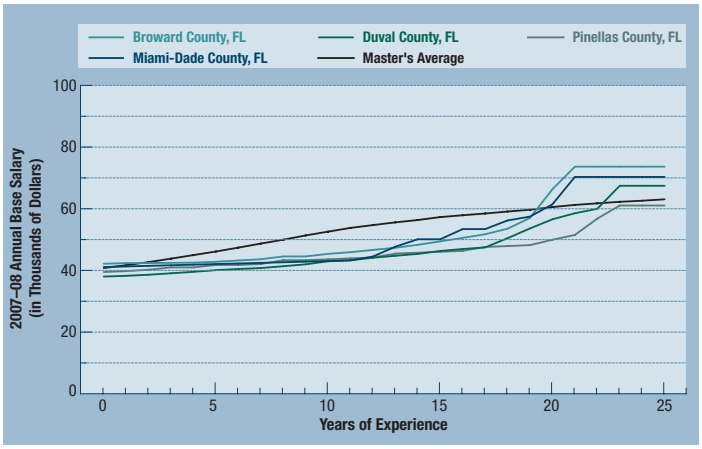
New York and many other districts back-load salaries, or reward teachers near the end of their careers with large salary raises. But the most extreme examples of back-loading come from Florida. Broward County, Fla., for instance, gives teachers an average raise of only $320 in their first 10 years on the job, but back-loads $20,000 in raises into a short time period between year 18 and 21 on the job, packing almost 40 percent of all experience-based compensation into these three late-career years, a stage when teachers are unlikely to gain effectiveness in a commensurate way. This trend has accelerated over the last decade, as teachers crossing the threshold from 20 to 21 years of experience in Broward County have netted average raises of 16.1 percent, compared to 5.2 and 6.5 percent raises, respectively, for teachers crossing the 18- to 19-year and 19- to 20-year thresholds.

Broward County's approach is typical in Florida, and **Chart 5** shows a handful of Florida districts with similar salary schedules.

These late-career raises and plateaus interact with the state's defined benefit retirement system. Florida calculates retirement benefits from a teacher's five highest salary years—their "final five." A Florida district opting to pay teachers extraordinarily well for their final five would pay higher salaries for those five years only, while the state would be forced to pay higher benefits for every year the teacher lives after retirement. High final five salaries decrease equity among teachers, because the district is allocating such a large portion of their salary expenditures on late-career teachers. It's a win for both union leaders and the district during contract negotiations, and the handful of Florida districts featured in Chart 5 are taking full advantage of state taxpayers in this way. Yet, these Florida districts are likely to struggle retaining mid-career teachers who face years of flat salaries before large rewards at the back end. At the same time, few teachers nearing the 20-year mark are likely to leave, even if they would otherwise prefer to, because of the large incentive waiting for them. No other district or state in the NCTQ sample back-loads their salary schedules in such an extreme way.

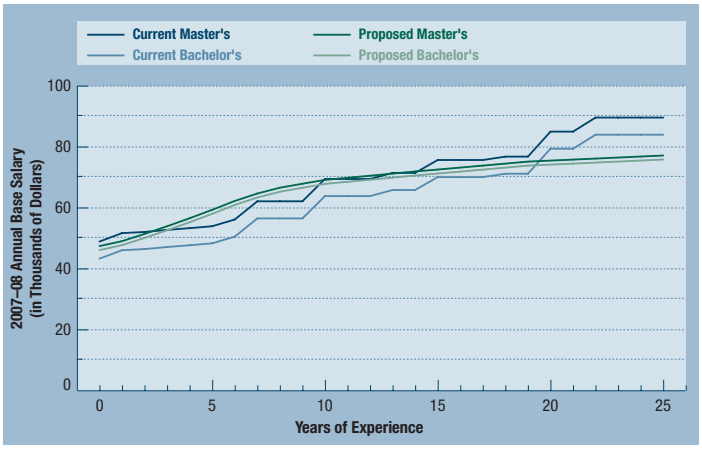
Chart 6 shows what an ideal schedule would look like in a single city, New York. Researchers have attempted to show what such an empirically based salary schedule would look like, but those attempts have been limited to state averages.[3] Looking only at state averages ignores the large differences across districts. Individual districts, the place where salaries are actually negotiated, must consider how their schedules are likely to affect teacher recruitment and retention.

Chart 5. Salaries of Fully Certified Teachers With Master's Degrees—Late-Career Gains



Source: Data were downloaded from the National Council on Teacher Quality's Teacher Rules, Roles, and Rights, available online at http://www.nctq.org/tr3/.

Chart 6. Salaries of Fully Certified Teachers in New York City—Current and Proposed Schedules



Source: Data were downloaded from the National Council on Teacher Quality's Teacher Rules, Roles, and Rights, available online at http://www.nctq.org/tr3/.

The proposed salary schedules in Chart 6 begin with a relatively high starting salary in order to recruit high-quality candidates into the field. They reward teachers for their early-career competence gains, but still include some benefits for experienced teachers to stay additional years. The costs of these schedules are comparable, in that they generate the same total expenditures on teacher salaries, assuming the national averages of the percentage of teachers who have bachelor's and master's degrees and who are in various stages of experience in their careers.[4]

The proposed schedules eliminate the more than $5,000 in uniform bonuses New York awards for credentials, giving only a small bonus to teachers with master's degrees—calculated to cover the cost of obtaining 32 graduate-level credits at the nearby Teachers College at Columbia University. Districts that offer tuition credits in addition to bonuses for coursework completion should re-distribute those credits into base salaries.

The proposed schedules also front-load salaries so as to reward early career gains to teacher effectiveness and to provide financial rewards to the teachers most likely to leave the profession. But, unlike Boston and other districts with hard plateaus, the proposed schedules reserve small bonuses from years 11–25. The schedules are in present dollars and would be adjusted annually for cost of living increases. Instead of large arbitrary increases before and after multiple years of stagnation, the new schedules follow a gentle, predictable curve that places no extra emphasis on any one year. Teachers who felt burned-out after year 19, for example, would feel no strong financial compulsion to stay an additional year.

None of the districts in the NCTQ sample currently employ such a balanced strategy, instead gravitating to extremes or to simple linear growth. With finite resources, these choices matter. The single salary schedule will likely continue to be used in most school districts for some time. Districts should construct these schedules in a way that will attract and retain the most effective classroom teachers.

Endnotes

[1] Robert Gordon, Thomas J. Kane, and Douglas O Staiger, "Identifying Effective Teachers Using Performance on the Job." The Hamilton Project (Washington, DC: Brookings Institution, April 2006).

[2] See, for example, Douglas N. Harris and Tim R. Sass, "Teacher Training, Teacher Quality, and Student Achievement," National Center for Analysis of Longitudinal Data in Education Research (Washington, DC: Urban Institute, March 2008) or Steven G. Rivkin, Eric A. Hanushek, and John F. Kain, "Teachers, Schools, and Academic Achievement." *Econometrica* 73, no. 2 (March 2005): 417-458.

[3] See, for example, Jacob Vigdor, "Scrap the Sacrosanct Salary Schedule," *Education Next*, Fall 2008.

[4] The comparability does not extend to possible changes in the value of teacher pensions.