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THE COMPENSATION QUESTION

Are public school teachers underpaid?

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This piece originally appeared on EducationNext.org and has been modified to include only the portion written by Mishel and co-author Joydeep Roy.

Over the past few years, as cash-strapped states and school districts have faced tough budget decisions, spending on teacher compensation has come under the microscope. The underlying question is whether, when you take everything into account, today's teachers are fairly paid, underpaid, or overpaid. In this forum, two pairs of respected economists offer very different answers. Andrew Biggs of American Enterprise Institute and Jason Richwine of the Heritage Foundation argue that, considering skills, workload, and benefits, today's teachers are, on average, overpaid. Lawrence Mishel of the Economic Policy Institute and Joydeep Roy of Columbia University and New York City's Independent Budget Office argue that Richwine and Biggs are off the mark, and that teachers deserve a raise. Read on, and decide for yourself.

Richwine and Biggs (hereafter R & B) provide an implausible and incorrect assessment that public school teachers are vastly overpaid. (In their technical report, they present results indicating that teachers receive a 52 percent compensation and a 21.5 percent wage advantage over comparable private-sector workers.) They reach this conclusion by putting a thumb on one side of the measurement scale. Their claim is implausible because they are simultaneously arguing that teaching is extremely well paid but has a low-cognition workforce. One wonders why, if this is the case, that the most

elite college graduates have not flooded schools as they have the financial sector and how teaching remains the only female-dominated high-paying occupation.

Wage Comparison

R & B find that teachers make 21.5 percent more in wages (per work hour) than comparably skilled workers. This conclusion is primarily generated by two flawed estimates: one is their correction for “summers off” and the other their *substitution* of the AFQT test score for education in a standard wage regression.

R & B argue that teachers have lower cognitive abilities than other college graduates and therefore traditional comparisons using education controls do not adequately control for ability. They present three estimates of the teacher hourly-wage differential: the traditional one with education as the only “skill” measure; a second that adds a test-score measure; and a third that omits education but retains the test-score measure as the *sole* measure of education, cognitive ability, and/or skill. When they add the test-score measure to the traditional education controls, their estimate of the teacher wage disadvantage falls slightly (from –12.6 percent to –10.7 percent). Only when they omit any education controls do they find that teachers earn the same wages as other workers; this they adopt as their *preferred* estimate and conclude that teachers have the same annual wages as comparable workers. They use these results to dismiss their own initial estimate of a 19 percent annual wage disadvantage for teachers, equivalent to claiming that the wages teachers earn for the school year correspond to what comparable workers earn in a full year’s work.

This preferred estimate compares teachers to other workers with similar test scores, even though the comparison group has substantially less education (nearly all teachers have a bachelor’s degree, and about half also have a master’s, while about one-third of the general workforce has a bachelor’s or further education). This procedure is highly unusual, and R & B provide no empirical test to show that education controls are not good predictors of wages. Their wage results are entirely dependent on omitting education and using the AFQT test score as the sole “skill” variable. The fact that a widely cited previous study did so does not inspire unconditional acceptance, as that study did not obtain different results when it used AFQT scores alone. In R & B’s study, the results are dramatically different. In addition, noncognitive skills like interpersonal skills are probably at least equally relevant in a classroom setting, and such skills are unlikely to be captured in standardized tests.

To adjust for differing lengths of work years, R & B boost teacher wages by 29 percent to reflect a teacher work year of 185 days. Their calculation assumes teachers have 15 weeks off in the summer, or 3.5 months. Yet work years for teachers go from mid-August to mid-June, leaving roughly two months off. That disparity is because the 185–day work year does not include spring or winter breaks or any holidays. The implied comparison is to other workers who are working 52 weeks, and the data being used for the wage comparison, the March Current Population Survey (CPS), include weeks of *paid vacation* as part of the work year. It is common sense to interpret a teacher’s annual salary as being applied to the time between when the school year starts and ends. The R & B correction is quick, simple, and wrong. A 2008 paper by Sylvia Allegretto, Sean Corcoran, and Lawrence Mishel presents a 14.1 percent wage correction for “summers off” based on 188 work days, 9 paid holidays, and 15.6 paid vacation days in a school year; 15 percent of teachers working in summer school; and nonteacher college graduates averaging a paid work year of 51 weeks (based on March CPS tabulations). Also, R & B need not include paid leave in their calculations because paid leave is captured in March CPS annual wages.

Current Wages of Former Teachers

R & B argue that teachers are overpaid because former teachers earn less when they quit teaching to take a nonteaching job. This assertion rests on two erroneous assumptions. First, the authors assume that those who quit teaching to take up a nonteaching job have similar characteristics to the average teacher such that the experience of these “leavers” is representative of all teachers. The second assumption is that the salaries of these leavers in their current nonteaching jobs reflect their “true” worth as teachers, even though their current jobs may not have much in common with teaching.

Note first that the Survey of Income and Program Participation data R & B use yield very small sample sizes for looking at these job transitions, roughly 150 teachers leaving teaching for nonteaching jobs. The Teacher Follow-up Survey of the Schools and Staffing Survey (SASS-TFS) provides data designed to examine teacher turnover, and it has a much larger sample, 706 former teachers currently working in nonteaching jobs.

SASS-TFS data (see Table 3) show that teachers who quit teaching to work outside of education, particularly those going to the private sector of the economy, were generally among the lowest-paid teachers. Further, they represented just 1 percent of the teaching force, hardly a representative sample of the overall body of teachers.

Movers and Stayers (Table 3)

Teachers who leave the profession tend to be among the lowest-paid teachers.

Public school teacher and private-sector benefits as percentage of salaries

Teaching Status between 2003-04 and 2004-05	Percent of Teachers in 2003-4	Median Teaching Salary in 2003-04
Stayers (remain in teaching and in same school)	83.7	\$41,000
Movers (remain in teaching but in a different school)	8.1	\$36,000
Remaining in the same school district	4.0	\$37,000
Moving to a different school district	3.9	\$35,000
Leavers	8.3	\$41,760
Working in education sector in a nonteaching capacity	2.4	\$39,000
Working outside of education	1.0	\$34,077
Retired	2.5	\$52,200

NOTE: The table shows teaching status and salaries of regular public school teachers, disaggregated by teaching status in following year.

SOURCE: Mishel and Roy's calculations based on Teacher Follow-up Survey of the Schools and Staffing Survey (SASS-TFS)

The data do confirm that those teachers (who are not average in any way) suffer a decline in earnings when they move out of teaching, particularly when they work outside of the education sector. Instead of showing that teachers are overpaid, however, these data suggest that teacher salaries are inadequate, at least for this group of teachers. As critics of current teacher recruitment and retention policies argue, teachers are not generally fired, so why do these teachers voluntarily take up low-paying jobs in other sectors? Most probably, teaching did not compensate these people enough given the working conditions involved. In other research using data from the CPS, we find that the most popular destination

occupations for former teachers outside of education are lower-paid positions such as librarians, cashiers, secretaries, and clergy.

Public versus Private School

R & B also argue that public school teachers are overpaid because their wages are significantly higher than those of private school teachers. However, this analogy is unlikely to be valid. There is significant movement of teachers across the two sectors. Presumably, most people considering a career in teaching are open to taking up a job in either sector. The data show that the background and educational qualifications of teachers working in private schools are quite similar to those of teachers working in public schools. With K–12 teaching being an integrated market, reducing public school pay would affect the ability of schools more generally to attract teachers, including private schools.

It is also instructive to note that teachers working in private schools quit teaching at a much higher rate than their counterparts in public schools, and almost two-thirds of these leavers rank an increase in salary to be very or extremely important in any possible decision to return to teaching. Richwine and Biggs are essentially attributing the wages paid to private school teachers as the market wage. The turnover from private schools to other sectors belies this point: private school salaries appear too low to maintain the workforce.

Compensating Differentials

Roughly 9 percentage points, or about one-fifth, of the 52 percent compensation advantage R & B claim is due to their estimated value of greater teacher job security. It is curious that R & B elect to monetize one aspect of teacher work but ignore all others. This is just one way they put their fingers on one side of the measurement scale. A more balanced assessment would consider other dimensions of teacher working conditions: the hierarchical nature of the job, the inflexible work hours, the relative inflexibility of vacation planning, the frequently unsafe working conditions, the lack of private office space, and the stress of being “on stage” nearly all day in front of students.

Moreover, it is far from clear that teacher job security is so special. Research by Alicia Munnell and colleagues at Boston College’s Center for Retirement Research, published in 2011, challenges whether public-sector job security has been greater in recent years, noting that “the peak-to-present drops in employment for state-local and private-sector workers can be projected almost perfectly based on the educational attainment of the respective sectors.”

Benefits

Much of the R & B claim of a large compensation advantage for teachers is due to their evaluation of pensions. The Bureau of Labor Statistics ECEC data indicate that teacher nonwage benefits (health, pensions, and payroll taxes) amount to 34.6 percent of wages, 4.6 percentage points higher than private-sector wages. In contrast to the BLS ECEC data, which indicate a 5.7-percentage-point pension benefit advantage (measured as a share of wages), R & B find a 25.8-percentage-point advantage (see retirement and savings in Table 2). This is because they triple the pension benefit for teachers compared to the BLS measure, estimating it to be 32 percent of wages rather than 11 percent. Fully 40 percent of R & B’s 52 percent teacher-compensation advantage estimate is thus based on their pension calculation.

Space limits an extended discussion here, but we note two conclusions from a 2012 article by Economic Policy Institute researcher Monique Morrissey, who explains that “the logical implication of Richwine and Biggs’s [pension] position

is that public employers and taxpayers would be indifferent between current pension funding practices and investing in Treasury securities, even though this would triple the cost of pension benefits” and that R & B “selectively alternate between the cost of benefits to employers and the value to workers, and inappropriately equate the latter with the often much higher cost to individuals of obtaining equivalent benefits.” In a 2012 article, economist Dean Baker points out that, in effect, R & B’s critique of defined benefit plans is that even if they cost the same as a defined contribution plan, they should be reduced because they provide more security: one wonders if taxpayers feel the same way.

R & B also add the cost of retiree health care but exaggerate the cost differences between teachers and other workers, as noted by Morrissey and in a 2012 analysis by Rutgers University professor Jeffrey Keefe.

Plausibility

Teacher wages have certainly declined relative to comparable private-sector workers over several decades. Allegretto, Corcoran, and Mishel report that decennial census data, comparable to the March CPS data used by R & B, show that from 1960 to 2000 teachers’ annual wages declined relative to comparable workers roughly 20 percent overall: 28 percent among women and 11 percent among men. March CPS data show an erosion of teachers’ relative wages from 1979 to 2005 of 11 percent overall: 16 percent among women and 8 percent among men. Other studies by Peter Temin, by Eric Hanushek and Steven Rivkin, and by Paul Peterson have shown similar trends. Richwine and Biggs make an argument that some estimates of the current *levels* of teacher pay advantage are biased because of failures to control for cognitive ability and so on. These critiques of the levels of teacher relative pay, however, do not address the substantial erosion of teacher relative pay in recent decades. If teachers currently enjoy a compensation and wage advantage, then the advantage was substantially greater in 1980 or 1960. If so, then it is curious that teaching is not an employment magnet comparable to the financial sector. How do you explain why the brightest students from the most elite schools are not adopting teaching as their *permanent* career? How can R & B argue simultaneously that teaching has low-cognition workers but exceptional pay? Moreover, if teaching has been and remains so attractive, then why is it the only predominantly female high-paying occupation? In a 2012 analysis of gender segregation across occupations, Francine Blau, Peter Brummund, and Albert Yung-Hsu Liu conclude, “A large entry of men into predominantly female occupations is unlikely, in our view; as long as such jobs continue to pay less for workers with similar characteristics, men have little incentive to enter them in large numbers.” One can readily conclude that since men have not entered teaching it must not be or have been well paid.

Richwine & Biggs’s claim of a large compensation advantage enjoyed by teachers is both implausible and incorrect. We commend the 2011 analysis by Allegretto, Corcoran, and Mishel, which found a teacher wage penalty of 12 percent in 2010, up 10.5 percentage points from 1979 (most of the increase occurring between 1996 and 2001). Taking benefits into account, they find a 9 percent compensation penalty for public school teachers in 2010.

The original claim by R & B was that teachers earn compensation and wages that are, respectively, 52 percent and 21.5 percent more than comparable workers. In other words, their findings suggest schools can cut compensation by as much as a third without harm, though in their current essay they only talk about how “moderate” pay reductions would not push the average teacher below his or her market-compensation level. There is scant evidence even behind this claim, and policymakers should be cautious in taking their results seriously.

R & B fail to address the fact that they substantially overvalue summers off, which they assert to be 15 weeks or 3.5 months long. And their decision not to account for differences in education as well as test scores relies on one paper in the literature, contradicting the overwhelming practice of labor market economists. Their estimates are fundamentally flawed. Nor do they respond to evidence that teachers moving to nonteaching jobs are not in any way average. The notion of extremely well-paid teachers is hard to square with reality, especially the failure of men to take over the teaching field.

On pensions, the issue is the cost to taxpayers (i.e., the employer's costs) rather than a speculative value to an individual (R & B's approach), because the policy context is state and local budgets. Using the expected rate of return on assets rather than the risk-free rate provides an unbiased projection according to accepted accounting standards (and to R & B) of actual employer outlays. Using a risk-free rate artificially inflates the value of the compensation of public employees. It only serves to obtain an inflated number to attract attention and is no guide to policy.