



\$SCHOOLS IN CRISIS: MAKING ENDS MEET

Beyond Teacher Reassignments: Better Ways Districts Can Remedy Salary Inequities Across Schools

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RAPID RESPONSE

It is well known that inside nearly all large school districts, the most experienced and highly paid teachers congregate in the more affluent schools. The opposite takes place in the poorer schools, where teachers tend to be more junior and lower paid, and teacher turnover is higher. Financially, this maldistribution means that a larger share of the district's salary dollars are spent on the more affluent schools, and conversely, the poorer schools with lower salaries draw down less funds per pupil.¹ The problem, of course, is that the resulting dollar allocation patterns work to *reinforce* achievement gaps, not address them.²

While districts have been slow to tackle this problem, it turns out that the federal Title I program could have some leverage. Title I, which delivers funds to high-poverty schools, has a "comparability" provision that requires districts to evenly distribute their state and local funds across schools before Title I funds are brought into the mix.³ A "loophole" in the requirement, however, permits districts to exempt salary differentials in comparability determinations.

Take, for example, 2004–05 data from the Austin Independent School District. As Figure 1 demonstrates, the district spends fewer state and local funds on the poorest schools where teacher salaries are lower. Federal Title I funds (the red bars) are layered onto

¹ These inequities have nothing to do with access to revenues via property taxes or state funding formulas, but rather occur within districts as they deploy funds already collected.

² It is worth noting that districts do not need the federal leverage in order to make progress in remedying within-district inequities. While the level of freedom districts have in allocating funds differs, most have the flexibility they need to create more equitable distributions across schools.

³ The thinking was to ensure that federal funds would not be used to offset inequities in local spending across schools within districts.

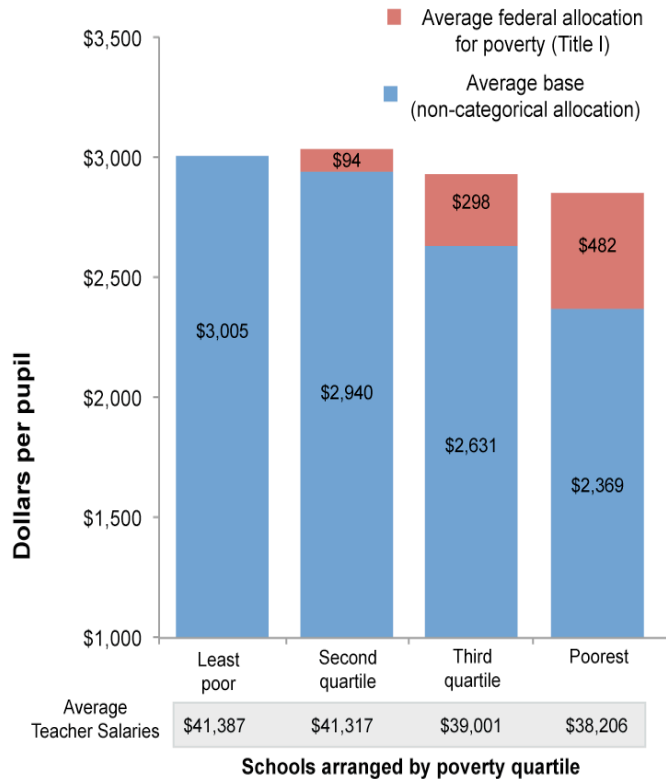
this uneven base. Federal grants are not large enough to boost spending in low-income schools to the level enjoyed by wealthier schools. Closing the comparability loophole could force equality in state and local spending (the blue bars), thereby forcing districts to address inequities created by teacher salaries. For these reasons, many have recently argued for closing the comparability loophole

Yet, despite the inequity that it permits, there are reasonable and fair-minded education advocates who believe this loophole should stand. Perhaps the most practical concern comes from district leaders who worry that if the loophole is closed, the district will have no choice but to reassign teachers against their will. Doing so, they argue, would prompt teachers to exit the system to the detriment of *all* students.⁴

This brief addresses this concern by demonstrating that districts would NOT need to mandatorily reassign teacher. It shows that there are other ways to restructure allocations that do not systematically shortchange the neediest schools. Discussed here are four options that districts could pursue to remedy school spending inequities created by uneven salaries:

- Option 1: Apply teacher salary bonuses to some schools to balance salaries
- Option 2: Vary class size across schools to level spending
- Option 3: Concentrate specialist & support staff in schools with lower-salaried teachers
- Option 4: Equalize per-pupil dollar allocations

Figure 1: Federal Title I funds layer on to uneven allocations of state/local dollars



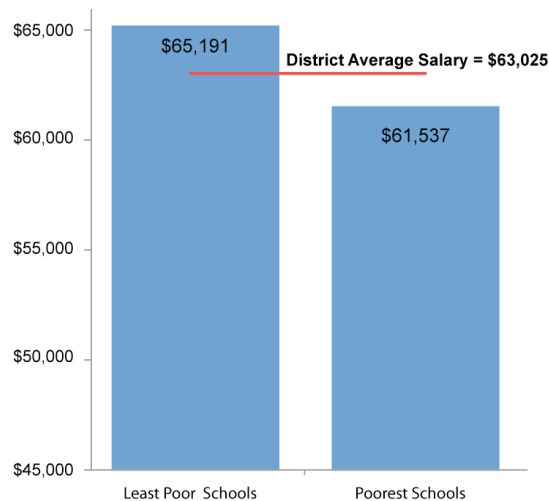
⁴ R. Gordon, *More Equity and Less Red Tape: Rethinking the Comparability and Compliance Provisions in Title 1 of the Elementary and Secondary Education Act* (Washington, DC: Center for American Progress, 2009).

Reallocation will depend on the extent of salary gaps

For districts, the first step will be to calculate the size of the salary gaps across schools.⁵ To determine their magnitude, the average teacher salary in each school or group of schools can be compared to the district average. For instance, Figure 2 portrays average salaries for elementary teachers in Tacoma Public Schools (TPS) in the highest- and lowest-poverty quartiles.⁶ Teachers in the poorest schools earn on average over \$3,600 less than those in the wealthiest schools. If the district does indeed have salary gaps—as TPS clearly does—the next step is to examine the resulting spending by school or group of schools.

Table 1 illustrates how teachers at Lyon and Mann Elementary schools earn 5 percent and 10 percent less, respectively, than the district average, while those at Sherman Elementary School earn 5 percent more. Line F shows how salary gaps translate to spending gaps, given the current assignment of teacher full-time equivalents (FTEs).

Figure 2: Salaries are lower in Tacoma’s poorest schools



While salary gaps will vary across districts, research on numerous mid- and large-sized districts suggests that the gaps evident in this example (ranging from 0 to 10 percent as measured from the district average) are roughly indicative of the average size of spending gaps to be remedied in many districts across the country.⁷ For a given district, then, the salary gap for schools or groups of schools can be measured on a percentage basis from the mean and a corresponding remedy can be applied.⁸

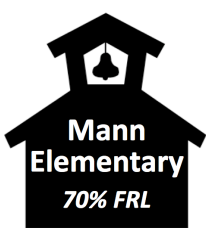
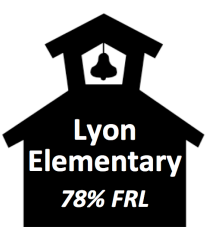
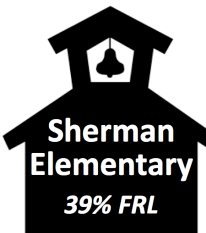
⁵ There are districts where there is no significant salary gap between high- and low-poverty schools and even districts where teachers in higher-poverty schools are paid more, but this is rare and is usually due to legislative or regulatory intervention to remedy what was a large gap.

⁶ Author’s calculations based on 2008–09 data obtained from Washington state’s OSPI office.

⁷ In existing studies, 65% of districts where a gap between the highest-poverty and lowest-poverty schools exists, the highest-poverty quartile schools are receiving between 2.5% and 10% less funding than their low-poverty counterparts: California’s Hidden Teacher Spending Gap: How State and District Budgeting Practices Shortchange Poor and Minority Students and Their Schools (Oakland: Education Trust-West, 2004); Education Trust, *Their Fair Share: How Texas Sized Gaps in Teacher Quality Shortchange Low-Income and Minority Students* (Washington DC: Education Trust, 2008); and M. Roza and P. Hill, “How Within-District Spending Inequities Help Some Schools to Fail,” in ed. Diane Ravitch, *Brookings Papers on Education Policy 2004* (Washington, DC: Brookings Institution Press, 2004).

⁸ Some districts may prefer to reallocate based on individual schools’ salaries, while others may group schools into poverty quartiles or deciles, to and reallocate for all schools in a group.

Table 1: Computing the spending gap to assess need for reallocation⁹

	 Mann Elementary 70% FRL	 Lyon Elementary 78% FRL	 Sherman Elementary 39% FRL
A. Average salary (district avg. = \$63,025)	\$56,598	\$59,705	\$66,306
B. Salary gap relative to average	10% lower	5% lower	5% higher
C. Number of teachers	23	16	20
D. Actual spending on teachers	\$1,301,765	\$955,283	\$1,326,114
E. Spending on teachers if salaries reflected district average	\$1,449,575	\$1,008,400	\$1,260,500
F. Reallocation needed for equity (Row D – Row E).	+\$147,810	+\$53,117	-\$65,614

In some districts there may already be efforts underway to offset these gaps with other expenditures, including those listed in the options below. The way to gauge the effectiveness of such measures is to compare the total non-Title I expenditures across schools including real (not average) salary allocations. With these figures a district can determine if its efforts to offset salaries adequately compensated for the existing salary gaps. After assessing the magnitude of the gap, the district can apply one of the following options to reallocate resources to balance spending. For each of the four options, this brief uses nationally representative cost figures and staffing patterns to model reallocation for different spending gaps.

Option 1: Apply teacher salary bonuses to some schools to balance uneven salaries

An obvious remedy for salary inequities across schools is simply to change the salaries. While compensation policies run deep, there has been an uptick in the use of bonuses to lure teachers to high-needs schools.¹⁰ While many point to surveys indicating that teachers prioritize working conditions over salary, one survey of teachers that offers specific, cost-equivalent investments in working conditions over salaries found the opposite. When faced with options, teachers preferred higher pay over a cost-equivalent change in working conditions (in the form of reduced class size, prep time, or teacher’s

⁹ Selected schools from TPS.

¹⁰ Per the National Center for Education Statistics’ 2007–08 Schools and Staffing Survey, 5.3% of school districts reported that they offer extra compensation to teach in what the survey called “less desirable” schools. Although the number of districts was small, it did include 7 of the 10 largest school districts in the country.

aides).¹¹ As a remedy for uneven spending, then, districts could craft a teacher bonus incentive to teach at “gap” schools where spending was currently low.¹² Where gap schools align well with poverty quartiles or other student characteristics, the bonus could be tied to these concentrations. Higher pay in gap schools ultimately could serve to attract more applicants and increase retention of more effective teachers. If so, the salary bonuses would serve not only to remedy current spending inequities, but ultimately work to address the underlying problem in teacher maldistribution.

Table 2: Projected bonus amount per teacher to remedy intra-district salary gaps

To remedy a salary gap of:	The bonus in gap schools would be:
2.5%	\$1,308 per teacher
5%	\$2,615 per teacher
7.5%	\$3,923 per teacher
10%	\$5,231 per teacher

Using the national average elementary school teacher salary of \$52,308 for illustration, the size of the bonus would be dependent on the district’s gaps, as demonstrated in Table 2. For schools where the average gap was 5 percent, a bonus designed to remedy spending inequities would amount to \$2,615 per teacher.¹³

Option 2: Vary class size across schools to level spending

A second strategy to remedy spending inequities caused by salary gaps is to reduce class size in gap schools, thereby sending these schools more teachers (and thus more funds) to level spending inequities.¹⁴ Here, the logic might be that lowering class size would reduce teacher workload in these gap schools, balancing the challenges inherent in schools with more junior faculty. Like the salary bonuses, this investment could ultimately work to make low-income schools more attractive to quality teachers who might otherwise opt to work in other schools.

Table 3: Projected impact on class size needed to remedy intra-district teacher salary gaps

To remedy a salary gap of:	Class sizes in gap schools would be reduced by:
2.5%	0.6 students
5%	1.1 students
7.5%	1.6 students
10%	2.1 students

¹¹ D. Goldhaber, M. DeArmond, and S. DeBurgomaster, *Teacher attitudes about compensation reform: Implications for reform implementation*, School Finance Redesign Project Working Paper 20 (Seattle, WA: Center on Reinventing Public Education, University of Washington, 2007); retrieved December 7, 2007.

¹² A “gap school” is a school where salaries are consistently less than the district average.

¹³ In practice, a district might apply bonuses to individual schools or to a pool of schools. The figures in Table 2 model the bonuses needed to bring the gap schools to the district average, not to the level of the highest-spending schools. To level salaries to those of the highest salaries, schools would require even higher bonuses.

¹⁴ The other option would be to lower class size by reducing enrollment at the gap schools.

Table 3 shows how the adjustment in class size is moderate, even in the school where the gap is relatively high. Using the national average class size of 23, in schools where there is as large as a 10 percent gap, class size would only need to be reduced by 2 students per class.¹⁵

Option 3: Concentrate specialist and support staff in schools with lower-salaried teachers

Districts also allocate funds to schools in the form of specialist and support staff. Some examples include librarians, tutors, reading coaches, aides, and other learning specialists. This remedy prescribes increasing the number of such staff members at a school until spending comparability between gap schools and schools spending at the district average is achieved. In a district where gaps work to the disadvantage of students with higher needs, this option would allow concentrating these specialists and support staff according to need.

Table 4: Projected number of additional specialist and support staff needed to remedy intra-district teacher salary gaps

To remedy a salary gap of:	An increase of one FTE certificated specialist:		An increase of one FTE tutor or aide:
2.5%	per 600 students	OR	per 272 students
5%	per 300 students		per 136 students
7.5%	per 200 students		per 91 students
10%	per 150 students		per 68 students

Table 4 uses national averages for salaries to model the number of staff that would be added to remedy various gaps.¹⁶ For instance, where gaps are as high as 10%, this remedy implies adding one certificated staff FTE for every 150 students over what is allocated on average in the district. Alternatively, the option is to allocate non-certificated tutors or aides at the rate of one FTE for every 68 students.

Option 4: Move to per-pupil dollar allocations to remedy gaps

The last option would remedy a salary gap by allocating *dollars* to schools to offset inequities in salaries. By allocating dollars, the district would, in essence, permit the use of all options listed above, or the use of non-staff investments such as digital programs. Table 5 models the per-pupil dollar amount increase needed to bring gap schools up to the district average. Using the nationally representative figures, remedying a 5 percent gap would imply raising spending at gap schools by \$114 per student.

¹⁵ Using the national average ratio of 15.4 students per teaching staff and class size of 23 students, the percentage reduction to remedy a 10% salary gap is 9.1% or 2.1 students.

¹⁶ Bureau of Labor Statistics, U.S. Department of Labor, Occupational Employment Statistics, accessed January 27, 2010 at www.bls.gov/oes/.

Table 5: Projected impact on per-pupil spending needed to remedy intra-district teacher salary gaps

To remedy a salary gap of:	The spending increase in gap schools would be:
2.5%	\$57 per pupil
5%	\$114 per pupil
7.5%	\$171 per pupil
10%	\$227 per pupil

In a bolder step, a district could move entirely to allocating dollars, instead of FTEs, in a pupil-based (or pupil-weighted) allocation system. Such a system would enable a thorough leveling out of uneven intra-district spending. In this model, districts allocate dollars based on students (or student types) and then apply the funds in various ways.¹⁷ Schools with lower-salaried teachers have more funds left over and can employ any of the options above (or other options) with their remaining funds. Those with higher-salaried teachers have fewer funds left over and may need to make trade-offs to sustain their higher-cost faculty (e.g. with higher class sizes, fewer specialists, etc.).

Finding the funds: new monies or reallocation?

For those lucky districts with new funds on the horizon, implementing any of these four options might be phased in using the new revenues. In this fiscal climate, however, many districts may have little choice but to remedy via “reallocation,” meaning that resources are moved *away* from one school and to another.¹⁸

Where reallocation is the only fiscally viable route, the above fiscal models also provide options of how to recoup funds from higher-salaried schools. Remembering that salary gaps were computed here as the distance between salaries at individual schools and the district average, the same magnitude of gaps—although in a positive direction—generally apply for those schools on the high end of the salary spectrum. As such, the same four basic options exist for moving resources *out* of those schools (the reverse of each option discussed here). Note that a district need not apply the same option for freeing up funds as it does for applying them. In other words, a district could raise class size in the higher-salaried schools as a way to fund bonuses in a gap school. Or, a district might give principals in high-salaried schools a choice of options to free up funds to support the reallocation. For some districts, such changes are most practical when they can be phased in over a few years, perhaps taking advantage of retirements as allocations are balanced across schools.

District policies and Title I leverage

At the time of writing, Title I (along with the rest of the Elementary and Secondary Education Act) is again up for reauthorization, and the comparability requirement is

¹⁷ This budgeting method, often referred to as Weighted Student Funding, prescribes funding the *students* and not the schools. See, for example, K. H. Miles, K. Ware, and M. Roza, “Leveling the Playing Field: Creating Funding Equity Through Student-Based Budgeting,” in *Phi Delta Kappan* 85 (October 2003): 114-119.

¹⁸ For districts with severe budget shortfalls, equity might be achieved via “leveling down,” such that resources are eliminated from some schools and not others.

under review. Whether the federal comparability loophole will be closed is uncertain. That said, it is fair to note that districts could simply choose to address salary inequities on their own without federal compliance pressure. Most districts could adopt any of the options described here, although few have done so.¹⁹

The persistence of salary inequities despite the current attention on achievement gaps suggests the sticky nature of the problem: District leaders pledge vigorously to close achievement gaps and yet year after year they continue (via salary inequities) to spend fewer state and local dollars on those very schools with the lowest-performing students. The challenge, of course, comes in changing the way districts allocate resources to schools. Undoing the inequity means changing either the salary schedule, or the staffing formulas, or teacher assignment policies, or some other long-established district allocation practice.

Making any of these changes would be big reform for a district. In the eyes of some, it would do more than just address the inequities at hand. Making these kinds of changes would be the first step in unlocking district resources so that they ultimately could be put to better use for students. Current salary schedules, for instance, drive funds from districts to schools in ways that make almost no connection to the needs of students. Similarly, class size policies often leave little room to concentrate resources on core subjects or on the lowest-performing students. Forcing true fiscal comparability could, some hope, finally eliminate practices that have historically worked against the poorest and neediest students—those very students Title I is designed to serve.

¹⁹ Oakland Unified, for instance, uses a student-based allocation formula whereby schools must absorb the real cost of their teachers' salaries into their school budgets.

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