

# **Unequal Education**

Federal Loophole Enables Lower Spending on Students of Color

Ary Spatig-Amerikaner August 2012





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# Introduction and summary

In 1954 the Supreme Court declared that public education is "a right which must be made available to all on equal terms." That landmark decision in *Brown v. Board of Education* stood for the proposition that the federal government would no longer allow states and municipalities to deny equal educational opportunity to a historically oppressed racial minority. Ruling unanimously, the justices overturned the noxious concept that "separate" education could ever be "equal."

Yet today, nearly 60 years later, our schools remain separate and unequal. Almost 40 percent of black and Hispanic students attend schools where more than 90 percent of students are nonwhite.<sup>2</sup> The average white student attends a school where 77 percent of his or her peers are also white.<sup>3</sup> Schools today are "as segregated as they were in the 1960s before busing began." We are living in a world in which schools are patently separate.

In *Brown* the Court focused on the detrimental impact of legal separation—the fact that official segregation symbolized and reinforced the degraded status of blacks in America. Today's racial separation in schools may not have the formal mandate of local law, but it just as surely reflects and reinforces lingering status differences between whites and nonwhites by enabling a system of public education funding that shortchanges students of color.

Separate will always be unequal. But just how unequal is the education we offer our students of color today? This paper answers this question using one small but important measure—per-pupil state and local spending. This fraction of spending is certainly not the only useful measure of educational opportunity. How we spend our money is perhaps more important. But newly released data give us the opportunity to shed new light, specifically on inequity in spending from state and local sources.

For the first time ever, the U.S. Department of Education in 2009 collected school-level expenditure data that includes real teacher salaries. Amazingly,

this had never been done before. I use these data to examine per-pupil spending in public schools, finding that:

- Students of color are being shortchanged across the country when compared to their white peers.
- The traditional explanation—that variation in schools' per-pupil spending stems almost entirely from different property-tax bases between school districts—is inaccurate. In fact, approximately 40 percent of variation in per-pupil spending occurs within school districts.
- Changing a particular provision of federal education law—closing the so-called comparability loophole—would result in districts making more equitable expenditures on students of color.

Variation within a district is largely due to district budgeting policies that ignore how much money teachers actually earn. When veteran teachers elect to move to low-need schools in richer, whiter neighborhoods, they bring higher salaries to those schools. New teachers who tend to start out in high-need schools, serving many students of color and poor students, earn comparatively low salaries. This leads to significantly lower per-pupil spending in the schools with the highest concentrations of nonwhite students.

To date, the size of the problem has been difficult to measure due to a lack of data. Other researchers have made important contributions to these conversations by documenting a pattern of underinvestment in minority students, <sup>6</sup> but they have been hampered by a frustrating lack of information. In 2009 the Obama administration showed that it recognized the importance of this issue by including a requirement in the American Reinvestment and Recovery Act of 2009 that districts report actual state and local spending on school-level personnel and nonpersonnel resources in school year 2008–09. In December 2011 the administration released the information to the public.

My analysis based on these new data calls into question a specific federal policy that is supposed to guard against within-district inequities. Title I of the Elementary and Secondary Education Act is the federal government's primary contribution to public education for students living in poverty. In order to receive Title I money, school districts have to promise to provide educational services to their higher-poverty schools that are "comparable" to those provided to the lower-poverty schools.

School districts across the country routinely tell the federal government that they are meeting this requirement. But the law explicitly requires districts to exclude teacher salary differentials tied to experience when determining comparability compliance. This is a major exclusion because experience is a chief driver of teachers' salaries. This misleading process leads to a misleading result—districts think they are providing equal spending on high-need schools and low-need schools, even though they aren't. This problem has been frequently called the comparability loophole.

The comparability requirement is, similar to most federal education law, silent on race. This paper builds upon the well-documented correlation between people of color and people living in poverty<sup>7</sup> to assess the ongoing impact of the comparability loophole on students of color.

In the first part of this paper, I paint a detailed picture of what is happening for our students of color across the country. The second part models two alternative futures in which state and local spending experience a one-time growth of approximately 4 percent. In the first model, present policy trends continue—we do not close the comparability loophole. In the second, we close the loophole by "leveling up" spending in schools that are currently being shortchanged. Table 1 presents the top-line findings. (see Table 1)

TABLE 1 **Unequal education** National per pupil spending shortfalls for students of color

	Today	No reform	Reform	Percent improvement
Shortfall in national per pupil spending on nonwhite students	\$334	\$347	\$192	45 percent
Shortfall in per pupil spending in schools serving 90 percent non-white students compared to all other schools	\$293	\$305	\$72	76 percent
Shortfall in per pupil spending in schools serving 90 percent non-white students compared to 90 percent white schools	\$733	\$762	\$485	36 percent
A 10 percentage point increase in students of color at a school is associated with a <i>decrease</i> in per pupil spending of	\$75	\$78	\$51	35 percent

Source: Author's analysis of newly released U.S. Department of Education expenditure data, part of a reporting requirement under the American Recovery and Reinvestment Act, adjusted for regional cost differences.

Table 1 presents a lot of important information. The most shocking is the data showing that schools with 90 percent or more students of color spend a full \$733 less per student per year than schools with 90 percent or more white students. What does that add up to? On average, the high-minority schools have 605 students. This average school would see an annual increase of \$443,000 in state and local spending if it were brought up to the same per-pupil spending level as those schools with very few nonwhite students. This is enough to pay the average salary for 12 additional first-year teachers or nine veteran teachers.

This shift in spending would not by itself fix the unequal spending on education now evident in school districts across our nation, as I detail in the main pages of this report. But it would go a long way toward ensuring that the vision of *Brown v*. *Board of Education* is implemented in the 21st century.

In addition to telling this national story, this paper highlights spending patterns in Texas and California, the states where a full 35 percent of U.S. students of color attend school. The trends in these states are similar to the national story shown in Table 1: Students of color are being shortchanged in per-pupil spending in all of the four ways I assess spending patterns.

Finally, the paper argues that Congress should gradually close the comparability loophole. Specifically, I recommend that when the Elementary and Secondary Education Act is reauthorized (which should happen soon since it has been due for reauthorization for several years), the comparability requirement should be changed in three phases, described in Figure 1.

This change in federal law would affect about 3,386 districts, where 77 percent of all students attend school.8 It is not a magic bullet—disparities in funding for students of color will persist. To completely resolve the problem would require addressing both within-district and betweendistrict spending problems in each state, as well as state-bystate discrepancies in educational support.

Much work has been done already to reduce between-district disparities. These battles

### FIGURE 1 Recommendation Phasing in a change to the federal comparability requirement

Phase 1: Reporting	Year 1  • Continue to hold districts accountable for existing comparability requirements, and • Require districts to report actual expenditures.
Phase 2: Transition	Years 2 - 4  • Continue to hold all districts accountable for old comparability requirements, and • Require districts not meeting new requirements (listed in Phase 3) to spend any new state and local money in schools with lowest actual per pupil expenditures.
Phase 3: Closed Loophole	Years 5 & Beyond: New Comparability Requirements  Title I schools must receive at least as much per pupil as average non Title I;  Must be calculated using actual teacher salaries;  Comparisons must be made within school level categories (elementary, middle, high); and  If all schools are Title I, then those in highest two quintiles of poverty must have spending at least as much as the average for those in lowest two quintiles.

have been fought in courtrooms and legislative chambers across the country. This paper, however, focuses only on whether and how we should close the comparability loophole in federal law—a reform that would reduce within-district disparities in per-pupil funding and reduce the amount by which we shortchange students of color. I believe you will find the new data and the conclusions we can draw from them compelling evidence for the gradual closing of the comparability loophole

# The problem: Underinvesting in students of color

### The national numbers

There are four ways to measure how much our country spends on students of color compared to white students. Each tells a different version of the same story. First, across the country schools spent \$334 more on every white student than on every nonwhite student. To get this figure I simply divided each school's adjusted total spending into "white" and "nonwhite" shares based on the proportion of students who are white. Then I added each of these "white" and "nonwhite" shares across the country and divided by the total number of white and nonwhite students. This is a nontrivial spending difference, given that the median per-pupil spending was \$4,038 (see appendix for explanation of per-pupil calculation). The \$334 average shortfall is 8 percent of the median per-pupil spending.

The second version of the problem is more troubling: It focuses on the most racially isolated schools. More than one-third of the students represented by this new dataset attend schools that are either more than 90 percent white or more than 90 percent nonwhite. The spending difference between these schools is large. The mostly white schools spent \$733 more per student than the mostly nonwhite schools, or 18 percent of the median per-pupil spending nationwide.

How big a problem is this for students in the high-minority schools? What could that money buy? The average-sized, mostly minority school has 605 students. This means that the average school serving 90 percent or more students of color would see an annual increase of more than \$443,000 if it were to be brought up to the same spending level as its almost-entirely-white sister schools. The average firstyear teacher in the United States is paid \$36,780; the average teacher with 11 years to 20 years of experience earns \$47,380.10 This funding could pay the salary for 12 additional first-year teachers or nine veteran teachers. 11 Alternatively, this funding could pay for any number of other useful personnel or resources such as school counselors, teacher coaches, or laptop computers.

Across the country schools spent \$334 more on every white student than on every nonwhite student.

Mostly white schools spent \$733 more per student than the mostly nonwhite schools.

We spend \$293 less per year on students in these heavily minority schools than on students in all other schools. OK, skeptics might say, but that is comparing the two ends of the spectrum: schools that are almost entirely white with schools that are almost entirely nonwhite. What about the whole story? The last two versions of the problem answer this question. Version three compares the "high-minority" schools (90 percent or more nonwhite) to all other schools. We spend \$293 less per year on students in these heavily minority schools than on students in all other schools. That's 7 percent of the median per-pupil spending.

Finally, across all schools, an increase of 10 percent in students of color is associ-

ated with a decrease in spending of \$75 per student. 12 This is a fairly small number, given that the median per-pupil spending in 2009 was \$4,038. This analysis does not imply that spending is being determined by race, explicitly or implicitly. But given the 20 percent gap in high school graduation rates between white students (78 percent) and their peers—Hispanic (58 percent), black (57 percent), and American Indian (54 percent)—spending less money on schools that serve more students of color, even if it is not on purpose, simply does not make sense.<sup>13</sup>

An increase of 10 percent in students of color is associated with a decrease in spending of \$75

per student.

Table 2 shows how an increase of 10 percent in students of color is related to per-pupil spending in each state. It shows that in 24 states an increase in the concentration of students of color is associated with a decrease in dollars spent per pupil. These 24 states educate 63 percent of all students of color. In 13 states the percentage of students of color is not related to a school's per-pupil spending. In 12 states an increase in the concentration of students of color is associated with an increase in per-pupil spending. This positive news is tempered by the fact that only 12 percent of students of color attend school in these states. (New Jersey was excluded from the entire analysis because it mistakenly included federal spending in its report instead of only state and local spending.)

TABLE 2 State spending on unequal education Relationship between school racial composition and dollars spent per pupil

A 10 pe	ercentage poi	A 10 percentage point increase in students of color is associated with				
A decrease in dollars per pupil in 24 states		No significan change in 1		An increase in do in 12 sta		
Vermont	-\$762*	Maine	-\$122	Mississippi	\$16*	
New Hampshire	-\$582*	DC	-\$117	Virginia	\$16**	
Nebraska	-\$298*	Wyoming	-\$108	Louisiana	\$29*	
Nevada	-\$257*	Delaware	-\$106	Maryland	\$36*	
Kansas	-\$188*	Michigan	-\$4	Missouri	\$41*	
New Mexico	-\$179*	Florida	-\$3	Minnesota	\$99*	
Connecticut	-\$151*	Indiana	\$2	South Carolina	\$118*	
Iowa	-\$151*	Tennessee	\$5	North Dakota	\$123*	
Colorado	-\$145*	Georgia	\$7	South Dakota	\$140*	
West Virginia	-\$125*	North Carolina	\$12	Ohio	\$162*	
Idaho	-\$120*	Massachusetts	\$16	Montana	\$180*	
Oregon	-\$114*	Arkansas	\$26	Alaska	\$409*	
California	-\$104*	Utah	\$28			
New York	-\$104*					
Wisconsin	-\$100*					
Texas	-\$95*					
Rhode Island	-\$78*					
Pennsylvania	-\$73*					
Oklahoma	-\$53*					
Washington	-\$50*					
Illinois	-\$42*					
Arizona	-\$37**					
Kentucky	-\$30**					
Alabama	-\$20*					

<sup>\*</sup>p < 0.05, \*\* p < 0.10

Source: Author's analysis of newly released U.S. Department of Education expenditure data, part of a reporting requirement under the American Recovery and Reinvestment Act, adjusted for regional cost differences.

### California and Texas

Because a full 35 percent of students of color attend school in either California or Texas, I highlight per-pupil spending patterns in these two states. Table 2 shows that schools in both states have a negative relationship between the percent of students of color and dollars spent per student. The problem is starker when we focus on those schools serving almost only nonwhite students.

- In the California schools serving 90 percent or more nonwhite students, perpupil spending is \$191 less than at all other schools, and \$4,380<sup>14</sup> less than at schools serving 90 percent or more white students. 15
- In the Texas schools serving 90 percent or more nonwhite students, per-pupil spending is \$514 less than at all other schools, and \$911 less than at schools serving 90 percent or more white students.<sup>16</sup>

Just how big are these differences? In California the average high-minority school has 759 students. If an average-sized school got an extra \$4,380 for every student, it would mean an extra \$3.3 million per year. If it were to get a more modest boost of \$191 per student to bring it in line with the majority of schools in the state, then it would get approximately \$145,000 extra per year. What could that buy? New teachers in California are paid approximately \$45,000 a year, and veterans with 11 years or more of teaching experience are paid an average of \$68,000 a year. <sup>17</sup> If per-student funding were increased in the schools serving almost entirely students of color to the same level as the rest of the state's schools enjoy, it would pay the salaries of two experienced teachers or three new teachers, or buy any number of other valuable educational inputs such as computers, guidance counselors, or teaching coaches.

In Texas the average high-minority school is 708 students; new teachers are paid \$39,150, and veterans earn \$47,110 each year. 18 If an average school in the Lone Star state were to receive an extra \$514 in per-pupil funding—enough to bring it up to the level of spending the rest of the schools in the state enjoy—it would be able to pay the salaries of seven veteran teachers or nine new teachers.

The bottom line: Across our country, we are spending less on students of color than on white students, at least when it comes to the state and local dollars reported by states under the new reporting requirement in the American Recovery and Reinvestment Act of 2009.

# How does this happen?

## Within-district and between-district variation in per-student spending

How do we end up spending so much less on minority students? What mechanisms create this per-pupil discrepancy? Researchers often think about the phenomenon of varied per-pupil educational investment at three distinct levels:

- **States**: States provide different levels of funding for education from one another.
- Between districts: School districts receive different amounts of funding.
- Within districts: School districts distribute funds differently among their schools.

Understanding which of these allocation policies are driving inequity in spending is important for those who want to effectively advocate for reducing this inequity. This paper does not address the variation in total education expenditures that exists between states. Instead, it asks how much total variation in spending exists in each state and then looks at whether the discrepancies stem primarily from within- or between-district spending.

# Unequal education spending: Total variation in each state

Let's start by looking at the total variation in per-pupil spending at the school level in each state. Table 3 displays each state's median per-pupil spending, as well as per-pupil spending in schools at the 25th and 75th percentiles of per-pupil spending. It also includes a "spread ratio," which is the difference between the 75th and 25th percentile expressed as a percentage of the median. This ratio is one easy way to see how evenly a state's money is being spent across its schools. The lower the ratio, the more evenly the money is being spent.

Note that the spread ratio for all states is more than 20 percent of their median spending, and that on average, the spread is approximately one-third of the state's median per-pupil spending. The differences in educational spending on the schools within every state in the country remain substantial.

TABLE 3 Unequal state spending per pupil Variation in adjusted per pupil spending by state in the 2008-09 school year

	25th Percentile (\$)	50th Percentile (\$)	75th Percentile (\$)	Spread Ratio (75-25/50) (%)
Florida	2,452	2,719	3,012	21
Washington	3,368	3,687	4,150	21
West Virginia	3,577	3,982	4,425	21
Tennessee	3,201	3,574	3,990	22
Alabama	3,587	4,017	4,507	23
Mississippi	3,016	3,396	3,801	23
Vermont	6,401	7,430	8,210	24
Georgia	4,115	4,612	5,239	24
Oregon	3,371	3,743	4,284	24
Kentucky	3,567	4,019	4,547	24
California	3,094	3,459	3,942	25
North Carolina	3,953	4,410	5,064	25
Michigan	3,214	3,662	4,172	26
Maryland	4,323	4,846	5,595	26
Delaware	4,232	4,906	5,536	27
Minnesota	3,514	4,041	4,602	27
Indiana	3,524	4,021	4,612	27
Maine	4,627	5,243	6,048	27
Louisiana	3,560	4,009	4,654	27
Rhode Island	4,739	5,479	6,253	28
Virginia	3,577	4,092	4,708	28
Hawaii	4,733	5,248	6,224	28
South Carolina	4,015	4,553	5,312	28
Missouri	3,273	3,727	4,336	29

	25th Percentile (\$)	50th Percentile (\$)	75th Percentile (\$)	Spread Ratio (75-25/50) (%)
Wisconsin	3,661	4,232	4,901	29
Texas	2,919	3,407	3,965	31
Ohio	4,147	4,828	5,637	31
Massachusetts	3,771	4,408	5,133	31
Iowa	4,284	4,899	5,804	31
Connecticut	4,768	5,633	6,523	31
Nevada	3,253	3,567	4,380	32
Utah	2,669	3,103	3,650	32
National Average	3,868	4,489	5,349	32
New York	4,457	5,225	6,193	33
Pennsylvania	4,144	4,882	5,779	33
Illinois	3,264	3,812	4,567	34
Colorado	3,592	4,186	5,046	35
Oklahoma	3,006	3,467	4,215	35
District of Columbia	4,702	5,442	6,622	35
South Dakota	3,297	3,812	4,723	37
Kansas	4,427	5,094	6,367	38
Arkansas	4,534	5,288	6,643	40
Montana	4,334	5,126	6,424	41
Arizona	2,721	3,258	4,112	43
Idaho	3,234	3,907	4,914	43
New Hampshire	4,696	5,847	7,405	46
North Dakota	4,545	5,486	7,107	47
Nebraska	4,374	5,285	6,881	47
New Mexico	3,494	4,261	5,575	49
Wyoming	5,517	6,736	9,335	57
Alaska	4,546	6,374	8,345	60

Source: Author's analysis of newly released U.S. Department of Education expenditure data, part of a reporting requirement under the American Recovery and Reinvestment Act, adjusted for regional cost differences

Of course, variation in per-pupil spending is not inherently bad. Increased investment in students who need the most support makes sense.<sup>20</sup> Further, some variation is easily explained—it is more expensive to run a high school than an elementary school, for instance (though note that when I recreate Table 3 using only elementary schools in each state, the numbers do not change much).

But this much variability in per-pupil spending, especially when coupled with the racial spending patterns described above, is cause for concern.

### Unequal education spending: Variation between and within school districts

The most common reason given for variation in the funding of schools is the history of school finance systems in which public schools were supported almost entirely by local property taxes. <sup>21</sup> Because of this well-known story, the majority of efforts by advocates of equal public education spending have been aimed at reducing spending inequities between school districts in the same states by redistributing education spending from wealthier to poorer districts.

But in recent years, researchers have started to document a new level of maldistribution of resources at the district level. "Almost universally," explains University of Washington's Center for Education researcher Marguerite Roza, "school districts magnify those initial [between-district] inequities by directing more non-targeted money to schools and students with less need."22 The primary mechanism through which this happens? Districts have teacher assignment practices that place the least-experienced teachers in high-minority, high-poverty schools. Because novice teachers earn so much less in salary, the total spending at these high-needs schools is likely to be lower than spending at schools in wealthier neighborhoods that employ veteran teachers.

The Center for American Progress published studies shining a light on these within-district inequities in teacher salaries in California and Florida. The former required painstakingly "pluck[ing], one by one, from online school accountability report cards," the average teacher salaries at each school.<sup>23</sup> Florida made the job easier by collecting and reporting expenditure data, including actual teacher salaries, at each school.<sup>24</sup>

FIGURE 2 Partition of variance in per-pupil spending

outh Carolina	23	7	7	
Georgia	26		74	
Wyoming	27		73	
Tennessee	30		70	
Arkansas	31		69	
West Virginia	31		69	
South Dakota	32		68	
Alabama	32		68	
Delaware	33		67	
Wisconsin	42		58	
Mississippi	42		58	
lorth Carolina	43		57	
Florida	46		54	
Michigan	49		51	
Loisiana	49		51	
Virginia	49		51	
Alaska	50		50	
Vermont	50		50	
Missouri	53		47	
Nebraska	54		46	
DC	55		45	
Maryland	56		44	
Kentucky	58		42	
Montana	58		42	
Rhode Island	59		41	
U.S. Average	59			41
Minnesota	60	)		40
Maine	60			40
Kansas	64			36
Nevada		64		36
Aassachusetts		64		36
Illinois	(	64		36
Oklahoma		66		34
Colorado		69		31
Ohio		71		29
Indiana		72		28
Utah		74		26
North Dakota		76		24
ew Hampshire		76		24
Pennsylvania		77		23
Connecticut		78		22
New York	79			21
Texas			21	
Oregon			18	
lowa		84		16
California		87		13
Idaho		87		13
Washington		89		11
New Mexico		90		10
Arizona	91			

Source: Author's analysis of newly released U.S. Department of Education expenditure data, part of a reporting requirement under the American Recovery and Reinvestment Act, adjusted for regional cost differences.

But even these illuminating studies do not solve the problem that the University of Washington's Roza identified in 2006: There was "no large scale national database" to assess the scope of this problem. 25 Until now.

## The latest data highlights both within- and betweendistrict inequities

41 percent of the variation in spending between schools happens within districts; the remaining 59 percent falls

between districts

in a state.

Figure 2 exploits this new data to show the percentage of variation in per-pupil spending occurring within and between districts in each state. The percentage of variation that is within districts—the part of the story that no one really talks about and that is likely driven by teacher salary differences—ranges from 9 percent in Arizona to 77 percent in South Carolina. 26 On average, 27 41 percent of the variation in spending between schools happens within districts; the remaining 59 percent falls between districts in a state.

This is a major finding. Contrary to popular belief, 28 individual districts themselves are responsible for a sizable amount of the variation in per-pupil spending. The common perception that discrepancies in wealth between districts are responsible for most of the variation in per-pupil spending within a state is simply not the whole story. In some states there is more between-district variation, and in those areas the focus should continue to be on addressing those funding discrepancies. But in the states at the top of Figure 2, the bigger problem appears to be within-district variation in spending.

Advocates of equitable education funding should target their strategies to individual states; the information in Figure 2 should help to contextualize reform efforts in each state. But Figure 2 also shows that within-district discrepancies in spending are a nationwide problem. The remainder of this paper presents a proposed solution to that problem.

# Comparability: A federal solution to within-district variation

The two primary findings of this paper thus far are that we are systematically (even if not intentionally) spending less on the schools that serve high concentrations of students of color, and the current discrepancies in per-pupil spending stems from both state and district spending policies. This whole analysis is about problems with state and local spending. But is there a role for federal policymakers?

Since 1936 Congress has had explicit permission from the Supreme Court to use its spending power to influence a wide range of state and local action.<sup>29</sup> What federal levers might Congress use to incentivize states and districts to change the disturbing spending patterns documented above? The Elementary and Secondary Education Act has been the primary source of federal education funding and policy intervention since its initial passage in 1965. Congress most recently reauthorized it in 2001 with the passage of the No Child Left Behind Act.

The money that flows through the federal programs authorized by these two laws makes up only 8.2 percent of all education spending. Nonetheless, this is a nontrivial amount of money: \$47.7 billion in 2007–08.30 By investing this much in our nation's schools, Congress has purchased a vote in how they are run. In recent history, federal lawmakers have not been shy about using their carrot-and-stick power to force dramatic accountability and teacher-training requirements on schools across the country. Consider, for instance, the now very well-known accountability and teacher-quality provisions added to the Elementary and Secondary Education Act by the No Child Left Behind Act.

So what can Congress do to change state and local spending practices? Title I of the Elementary and Secondary Education Act—"Improving the Academic Achievement of the Disadvantaged"—authorizes the largest pot of federal education money, and thus carries the most potential for effecting change. Because the money is allocated to school districts directly, it is easier to use it to change district policies than state policies.

Congress has always demanded that districts use the federal dollars to enhance educational opportunities for low-income students. The federal funding is supposed to provide additional help for schools serving disadvantaged students, not replace state and local funding that would otherwise go to them.<sup>31</sup> Congress included three specific financial requirements to keep districts from using federal funds improperly:

- A supplement-not-supplant requirement that says federal funds must be used to supplement nonfederally funded expenditures, not supplant them
- A maintenance-of-effort requirement that says districts must spend at least 90 percent as much each year as in the year prior
- A provision called the comparability requirement that is designed to ensure that all schools receiving Title I funding are providing services to their students comparable to those in non-Title I schools before federal funds are distributed<sup>32</sup>

Collectively, says the Department of Education, these requirements are "critical to the success of Title I, Part A because they ensure that the federal investment has an impact on the at-risk students the program is designed to serve—something that would not occur if federal dollars replaced state and local resources that would otherwise be made available to these at-risk students."33

Because I suggest changing the requirement, it is important to take a moment first to understand the details of the way the current law does and does not work.

In order for a school district to receive its formula-based Title I grant each year, the comparability provision says the district must show that, "Taken as a whole, services provided in Title I schools from state-and-local funds be at least comparable to those provided in non-Title I schools."34 The Department of Education explains that, "The purpose of this comparability requirement is to ensure that federal assistance is providing additional resources in high-need schools rather than compensating for an inequitable distribution of funds that benefits more affluent schools."35

Districts can demonstrate compliance with this comparability requirement in several ways. Approximately 80 percent use a method sanctioned by official Department of Education guidance by ensuring that student-to-teacher ratios in Title I schools are between 90 percent and 110 percent of the average in non-Title I schools.<sup>36</sup> The districts can do this within "school-level" bands—i.e., by comparing elementary schools to elementary schools—or in the district as a whole.<sup>37</sup>

If all schools are served by Title I, then every school must have between 90 percent and 110 percent of the district average student-to-teacher ratio.<sup>38</sup>

Districts can also choose to show comparability using expenditure data instead of student-to-teacher ratios. In this case, they report personnel spending equal to the number of teachers at each school multiplied by the average district teacher salary, an accounting maneuver that effectively wipes out experience-based salary differentials received by individual teachers.<sup>39</sup>

### The loophole that undermines comparability's effectiveness

There are two problematic assumptions in both of these widespread methods of proving that Title I schools are getting comparable services to non-Title I schools. First, they assume that the primary purpose of the comparability requirement was to address the allocation of teachers—and not the allocation of other forms of educational services. The Department of Education's guidance, after all, allows districts to comply by showing only student-teacher ratio comparability. Districts are thus free to completely ignore resources such as school facilities, textbooks, and appropriate and high-quality curricular and extracurricular offerings.

Second, these approaches treat teachers as interchangeable "widgets" that each provide "comparable" services to their students. 40 They intentionally do not acknowledge that these teachers do not actually cost the district the same amount of money. In fact, the statute explicitly forbids including any salary differentials based on years of experience when making comparability calculations.

These problems join together to form what scholars and advocates call the "comparability loophole."41 This loophole allows districts to claim that they are providing comparable services to Title I and non-Title I schools even if all their most expensive (and likely most experienced) teachers may be clustered in non-Title I schools. By intentionally turning a blind eye to this particular type of resourceallocation decision, scholars argue, Congress and the Department of Education are undermining the intent of the billions of dollars they are spending. These funds are intended to provide services "on top of" those purchased using equally distributed state and local funds. In reality, the funds are anything but equal.

Title I money is allocated primarily based on poverty levels, which means ensuring that Title I schools have "comparable services" is largely equivalent to ensuring that high-poverty schools get their fair share of state and local funding. Since race and poverty are highly correlated, 42 it is it is reasonable to predict that this loophole is depressing the amount of money spent at schools serving students of color. Conversely, it is reasonable to predict that closing the loophole would increase per-pupil spending on students of color.

If these rules

How would closing the loophole change spending patterns?

were adopted today, 3,836 districts across the country—where 77 percent of students attend school would be forced to change their spending patterns

In assessing the benefits and costs of changing this policy, the first step is to define exactly what the new "closed" comparability requirement would require. In a paper for the Center for American Progress in 2008, Ross Weiner, then-vice president at the Education Trust—a nonprofit advocacy and technical assistance firm—spelled out specific recommendations. 43 In order to receive their Title I funds, districts should have to show that they are providing comparable services by:

- Including actual teacher salaries in the calculations instead of average salaries
- Including all general education expenditures in the calculations and not just the number of teachers
- Showing that Title I schools are each receiving at least as much as the district's average for non-Title I schools instead of between 90 percent and 110 percent of the non-Title I average
- Comparing Title I schools with the non-Title I schools in the same grade level
- Requiring—in districts where every school in a particular grade level is a Title I school—schools serving the highest two quintiles of students living in poverty to spend at least as much as the average for those schools serving the lowest two quintiles

compliance.

or risk being out of

If these rules were adopted today, 3,836 districts across the country—where 77 percent of students attend school—would be forced to change their spending patterns or risk being out of compliance.44

This section of the paper asks two sets of questions. First, would closing the loophole change the patterns of underinvestment in students of color? And second, what would individual districts actually do to implement it, how hard would it be, what would it cost, and what unintended consequences might ensue? These answers inform the final recommendation to gradually close the loophole while also pursuing other, broader policy changes at a federal level.

In order to predict the effects of changing the law, I model what would happen if the loophole were closed. There are three general ways that the loophole could be closed:

- Reallocate existing resources: School districts would be given no new money and told they had to spend at least as much on Title I schools as non-Title I schools. The result, in districts not meeting this requirement, would be to reallocate resources from the non-Title I schools to Title I schools.
- Equalize with new money: School districts would be subject to the same requirement but would use new funds to "level up" the Title I schools to a level of spending equal to their non-Title I counterparts.
- **Combination:** Districts could be required to reallocate some funds and also be given some new money.

Of the three options, I model the so-called leveling-up version in this paper for two reasons. First, it is the most straightforward to model. Second, it is the most politically feasible, as I discuss below. This leveling-up solution would cost a total of \$6.83 billion, which is less than 4 percent of current general state and local education funding.<sup>45</sup>

To create this modeled "closed loophole" world, I artificially increase spending at Title I schools to the level that would be required under a closed loophole (the average spending in non-Title I schools serving the same grade levels) if their 2009 spending registered below this bar.

In what follows, I compare spending patterns in the closed loophole world with today's real world as reported to the Department of Education using 2009 data. While this is a useful comparison, it is not entirely fair, because the closed-loophole world allocates \$6.83 billion more than today's real world. To address this, I add a model that increases spending by the same amount but without closing the loophole. This allows us to compare what our education spending patterns will likely look like if we do nothing—do not fix the loophole and simply allow spending to grow as the economy recovers—with what the education spending patterns might look like if we close the loophole.

By essentially throwing \$6.83 billion at our schools in two different ways—first under today's rules and second under the proposed new rules—I assess what the comparability loophole is going to cost students of color in the near future if we do not close it.

This leveling-up solution would cost a total of \$6.83 billion, which is less than 4 percent of current general state and local education funding.

New public education spending without a change in this law will exacerbate the inequities in spending on students of color and their white peers.

How will closing this ostensibly race-neutral comparability loophole change the national pattern of spending on students of color? Figures 3 through 6 each highlight one of the four versions of the problem described in the first section of this paper. They compare the spending patterns in three alternative worlds:

- The real world with the comparability loophole in place
- A hypothetical scenario with 4 percent spending growth allocated under today's rules with no fix to the comparability loophole
- A hypothetical scenario with 4 percent spending growth allocated according to the rules if the comparability loophole were closed

Figures 3 through 6 detail the results.

#### FIGURES 3-6

### Four ways to describe what closing the comparability loophole would mean for students of color

#### FIGURE 3

Effect of closing loophole on national spending per student

National spending per student		
Today	We spend \$334 more per year on each white student than on each student of color.	
No fix	The problem gets worse. We will spend \$347 more per year on each white student than on each student of color.	
Closed world	The problem gets better. We would spend \$192 more per year on each white student than on each student of color.	
Take Away: Fixing the loophole would decrease the spending disparity by \$155. That's almost one half of the original spending gap.		

#### FIGURE 4

Effect of closing loophole on spending gap between 90 percent minority and 90-percent white schools

Mostly minority schools compared to mostly white schools			
Today	Mostly white schools spend \$733 more per student than mostly minority schools.		
No fix	The problem gets worse. Mostly white schools will spend \$762 more per student than mostly minority schools.		
Closed world	The problem gets better. Mostly white schools would spend \$485 more per student than mostly minority schools.		
Take Away:  One third of students attend these highly segregated schools where the population is more than 90 percent white or nonwhite. If we close the loophole, the spending gap is reduced by more than one third.			

#### FIGURE 5

Effect of closing the loophole on spending gap between 90 percent minority schools and other schools

Mostly minority schools compared to all other schools				
Today	Mostly minority schools spend \$293 less per student than everyone else.			
No fix	The problem gets worse. Mostly minority schools will spend \$305 less per student than everyone else.			
Closed world	The problem gets better. Mostly minority schools would spend \$72 less per student than mostly minority schools.			
Take Away: A full 80 percent of the gap between the schools serving mostly minority students and all other schools would be eliminated if we closed the comparability loophole.				

#### FIGURE 6

Effect of closing the loophole on relationship between percent student body nonwhite and per pupil spending

National spending patterns by percent of nonwhite students				
Today	An increase of 10 percent students of color leads to \$75 less per student spending in a school.			
No fix	The problem gets worse. An increase of 10 percent students of color will lead to \$78 less per student spending in a school.			
Closed world	The problem gets better. An increase of 10 percent students of color would lead to \$51 less per student spending in a school.			
Take Away: Closing the loophole would improve the national relationship between race and state and local education spending. It would decrease the problem by 36 percent.				

Source: Author's model calculations

These findings show that the problem (underinvesting in students of color) will get worse if we allow the law to remain unchanged. This is important for progressives to understand: New public education spending without a change in this law will exacerbate the inequities in spending on students of color and their white peers. In contrast, if we close the comparability loophole and districts comply (more on implementation challenges below), then we can make big strides in reducing the racial per-pupil funding disparities that are shortchanging students of color across the country. (see Figure 7)

FIGURE 7 Bottom-line budget implications for high-minority schools

Comparisons to other schools are important, but what are the bottom line budget implications of the loophole for high minority schools?

Today	High minority schools spend \$4,149 per student.				
No fix	They will spend \$4,312 per student.				
Closed world	They will spend \$4,492 per student.				
Take Away:  Not fixing the loophole will cost the average high minority school \$180 per student.  When we reach a point where state and local spending has grown by about 4 percent, the loophole will cost the average high minority school serving 605 students \$109,000 per year. That's quite a price tag.					

Source: Author's model calculations

Table 5 on pages 26-27 shows the state-by-state effect of closing the comparability loophole in version 4 of the problem—the relationship between percent of students of color and per-pupil spending. Similar to the prior figures, it compares today with an increase in spending of 4 percent allocated under today's rules and with an increase in spending of 4 percent allocated under a closed loophole. The last column shows the difference between the hypothetical world in which spending increases by 4 percent but there is no fix for the loophole, and the hypothetical world in which spending is increased by 4 percent and the loophole is closed. This column is essentially a measure of the cost of the comparability loophole from the perspective of students of color—it improves (it is a positive number) in all but five states.<sup>47</sup> The states are ordered by this column so students of color living in the states at the top have the most to gain from closing the loophole.

TABLE 5 Helping students of color by closing the comparability loophole

Effect of closing the loophole on the relationship between a 10 percent increase in percent students of color and dollars spent per pupil

### An increase of 10 percentage points in students of color is associated with what change in per pupil spending?

	Today	Open	Closed	Difference: open to closed
Vermont	-\$762	-\$792	-\$628	\$164
Maine	-\$122	-\$127	\$26	\$152
South Dakota	\$140	\$145	\$253	\$108
Alaska	\$409	\$425	\$532	\$107
Connecticut	-\$151	-\$157	-\$71	\$86
Pennsylvania	-\$73	-\$76	-\$6	\$69
Texas	-\$95	-\$99	-\$43	\$56
Michigan	-\$4	-\$4	\$47	\$51
Idaho	-\$120	-\$124	-\$74	\$50
Missouri	\$41	\$43	\$91	\$48
Rhode Island	-\$78	-\$81	-\$34	\$47
New Mexico	-\$179	-\$186	-\$142	\$44
Ohio	\$162	\$168	\$209	\$41
New York	-\$104	-\$108	-\$70	\$37
Illinois	-\$42	-\$44	-\$7	\$36
Wisconsin	-\$100	-\$104	-\$70	\$35
Nebraska	-\$298	-\$310	-\$283	\$27
Kansas	-\$188	-\$196	-\$171	\$25
Massachusetts	\$16	\$17	\$41	\$24
Georgia	\$7	\$7	\$31	\$24
Arizona	-\$37	-\$39	-\$15	\$23
Montana	\$180	\$187	\$210	\$23
Maryland	\$36	\$37	\$60	\$23
Oklahoma	-\$53	-\$55	-\$35	\$20
Oregon	-\$114	-\$118	-\$101	\$18
Colorado	-\$145	-\$151	-\$134	\$17
California	-\$104	-\$108	-\$91	\$17
Arkansas	\$26	\$27	\$44	\$17
Iowa	-\$151	-\$157	-\$141	\$16
Indiana	\$2	\$3	\$18	\$15

An increase of 10 percentage points in students of color is associated with what change in per pupil spending?

	Today	Open	Closed	Difference: open to closed
South Carolina	\$118	\$123	\$138	\$15
Tennessee	\$5	\$5	\$19	\$14
Washington	-\$50	-\$52	-\$40	\$12
Florida	-\$3	-\$3	\$8	\$11
Alabama	-\$20	-\$20	-\$10	\$11
New Hampshire	-\$582	-\$605	-\$595	\$9
Mississippi	\$16	\$17	\$25	\$8
West Virginia	-\$125	-\$130	-\$122	\$7
Kentucky	-\$30	-\$31	-\$25	\$7
Nevada	-\$257	-\$268	-\$261	\$6
Louisiana	\$29	\$30	\$34	\$4
North Carolina	\$12	\$12	\$15	\$2
Delaware	-\$106	-\$110	-\$108	\$2
Minnesota	\$99	\$103	\$104	\$1
Virginia	\$16	\$17	\$14	-\$3
Utah	\$28	\$29	\$24	-\$5
Wyoming	-\$108	-\$112	-\$117	-\$5
North Dakota	\$123	\$127	\$118	-\$10
DC	-\$117	-\$122	-\$132	-\$10

Results from general regression of adjusted dollars per pupil on "%nonwhite" in each state using actual spending data (today) and modeled spending data (closed).

Source: Author's analysis of newly released US Department of Education expenditure data, part of a reporting requirement under the American Recovery and Reinvestment Act, adjusted for regional cost differences.

How do our two states of particular interest fare? In California closing this loophole would take a step in the right direction by reducing the magnitude of the negative relationship by 16 percent (\$17 per student). In Texas closing the loophole would cut the negative relationship between the percent of students of color and per-pupil spending by more than half, from a \$99 decrease to a \$43 decrease with every 10 percentage point increase in students of color.

These numbers might seem trivial. In Texas, for example, if a 10 percentage point increase in students of color is associated with a \$43 decrease in per-pupil spending due to closing the loophole, instead of a \$99 decrease by not closing it, does that really matter? Is that enough to justify changing the policy? This \$53-perstudent annual change in an average Texas school of 552 students is the equivalent of \$29,256—less than one new teacher's salary. This isn't nothing, but it also isn't a game changer for these students.

Again, however, the meaningful spending differences are at the extremes—as described above, the schools with 70 percent, 80 percent, and 90 percent students of color that are losing out on substantial sums of money if we don't close the loophole. A school with 90 percent or more students of color in Texas today spends \$911 less per pupil than a school with 10 percent or less students of color.<sup>48</sup>

When the current budget crisis ends in Texas and state and local spending starts to increase, what will happen? If we let present trends continue—if we don't close the loophole and state and local public education funds grow by 4 percent then the gap will grow to \$946. If, instead, we close the loophole, then that same increase in spending will lead to a different result: That gap would be cut in half, down to \$477. That adds up to an annual difference of \$338,000 enough to pay salaries for eight new teachers or seven veteran teachers.

For a high-minority school in Texas, its spending relative to an all-white counterpart might matter less than the school's spending relative to what it should get if the loophole were closed. Under the model where the loophole remains, these schools have average per-pupil spending that is \$316 less than the model where the loophole is closed. The average high-minority school in Texas has 708 students. In a hypothetical world in which state and local education spending increases by approximately 4 percent, the loophole would cost this average highminority school \$224,000 a year. That is the cost of salaries for five new teachers or four veteran teachers.<sup>49</sup> It could, alternatively, buy every student in the school a laptop computer.50

# Effects of an ostensibly race-neutral policy on students living in poverty and students of color

Comparability requirements are technically race-neutral. This analysis provides one example of the way that "color blind" policies can have dramatic racial implications. The costs of this federal policy are not equally shared across race lines: Students of color are bearing the bulk of the burden.

Nonetheless, in analyzing a policy change of this magnitude, I would be remiss to ignore effects on students living in poverty more broadly. Not surprisingly (since the comparability requirement is written for their benefit), closing the loophole appears to also be good news for this larger population as a whole.

An increase of 10 percentage points of students living in poverty today is associated with a school budget decrease of \$19 per student. If we do nothing to close the loophole before the economy rebounds and education spending rises by 4 percent, the problem will get slightly worse, meaning the decrease in spending associated with a 10 percent increase of students in poverty will be \$20. But if we close the loophole, the negative relationship is eliminated. In the hypothetical world where we increase spending by 4 percent and do close the loophole, the model predicts that an increase of 10 percentage points of students living in poverty will be associated with a \$2 increase in per-pupil spending.

For students attending a school where more than 90 percent of students live in poverty, how much does it matter if we close the loophole? With the loophole closed, these schools would spend an average of \$4,880 per pupil. In a world where we spend the same amount of money but do not close the loophole, the average spent would be \$4,768. That's a difference of \$112 per student. The average high-poverty school serves 460 students. Thus for these schools, the cost of the loophole is approximately \$52,000 per year—and will go up over time. This is more than the average first-year teacher is paid nationally.<sup>51</sup>

### Administrative challenges to closing the comparability loophole

Concerns about closing the loophole fall broadly into two groups: administrative and substantive. This section of the report focuses on two of the most common administrative concerns: Data management and conflicts between union contracts, federal law, and budget shortfalls.

### Data management

The first question always raised about closing the comparability loophole by making districts account for actual teacher salaries is "How hard would this be for districts? Can they even track this data?" Until 2009 the Department of Education had never asked school districts for this information, and their data systems are often not set up this way. The traditional school district has a payroll system and a budgeting system that are separate. They are not designed to speak to one another. The payroll staff is in charge of paying teachers; the budget staff assigns teacher slots to schools without regard to their cost. 52 These budget offices are generally the ones responsible for maintaining federally mandated comparability requirements among Title I and non-Title I schools.

The question, then, is whether a school district budget office has access to the information it would need to balance school-level spending as determined by actual teacher salaries.

"Of course," says Matt Hill, chief strategy officer at the Los Angeles Unified School District. "You know where your people are and how much you're paying them. I just don't see what's so hard."53 Hill went on to explain that at his previous job at the Oakland Unified School District, he used to just "download the whole budget and all the personnel files into [his personal] computer for 30,000 kids." It isn't magic, but it does take time and a little know-how, Hill says, and there should be some technical assistance provided to districts if and when this change is implemented.

Kristen Ferris, a manager at Education Resource Strategies, 54 agrees. As part of their consulting arrangements with urban school districts, her firm does equity analyses of how school districts spend their money. One of the things the firm does is assess total per-pupil spending at each school using actual salaries. "It's

a pain," she says, but the districts don't have a problem actually producing the information. And once it is in her firm's hands, it generally only takes their team about 16 hours to merge the information.

Sharon Eaves, general manager of the budgeting office at Houston Independent School District, also says the data management problem is not a policy hurdle. "Administratively, it wouldn't be a problem," she says, so long as there are clear definitions of what to include in "actual salaries."55

### Stuck between union contracts, shrinking budgets, and new federal law

Clearly there is no technological reason we cannot ask districts to make this change. But will closing the comparability loophole put district administrators in a situation that feels so difficult that it may as well be impossible?

Robert Campbell, an analyst at the Government Accountability Office who prepared a congressional briefing on this topic a few years ago, says there is "no question" that if you change this rule without changing teacher salary policies (where salary is based on experience), teachers would have to be rearranged so that more of a district's experienced teachers are in Title I schools. "That's kind of the point," he says. "We, well, advocates, want teachers to be moved [because] there's a problem with the current structure."56

In addition to the obvious questions this raises about the wisdom of forced teacher transfers, which will be addressed below, this raises an administrative problem for districts. They will be stuck between a rock and a hard place: Their union contracts don't allow forced teacher transfers, but this new federal comparability rule will essentially require teacher transfers.

Many advocates of closing the comparability loophole will disagree. Comparability can (and should, many say) be achieved without forcing teacher transfers. Hill of the Los Angeles School District is a big advocate of closing this loophole. He says, "It's not right for teachers or for kids to try to move teachers around. I don't think forced transfers is a good solution. Anyone who opposes this [change] says [transfers are the only option] if you close the loophole ... because no one wants that."

In fact, in the most recent legislative proposals to close this gap introduced in March 2011, the drafters went so far as to include language explicitly stating that the legislation does not require forced transfers.<sup>57</sup> But the Government Accountability Office's Campbell is skeptical of closing the loophole without effectively forcing teacher transfers. He points out that 90 percent of a school's expenses are instructional, meaning salary and benefits. "I think for the most part, nothing [other than teacher transfers] would cut it. There's just not enough money in other things to really make a difference. It's not just about moving computers from one place to another."58

For her part, Eaves of the Houston Independent School District budget office does not have to worry about union contracts because Texas is a right-to-work state that doesn't have collective bargaining with unions. But she nonetheless says that it would be "impossible" for her to meet this new requirement without forcing teacher transfers. "The model we ran showed that at least 50 percent of my campuses would not be in compliance. How do I bring them into compliance? I would probably have to try to level up ... and where do I get the money to do that? In a time where districts are losing money, you can't mandate an increase like that. We just had a 6 percent reduction in funding from the state in 2011–12, and we're losing more in 2012-13."59

Hill has perhaps the best response to this legitimate concern. He says that we should adopt this new comparability requirement in phases. We should first require districts to start publicly reporting their actual per-pupil expenditure data by school using real teacher salaries. This will allow advocates to explain to parents and community members how the loophole is affecting their schools. Then, when the economy starts to recover, and we start to grow district budgets, we ensure that this rule is in place so that the new money is allocated more equitably.<sup>60</sup>

The challenge, it seems, is crafting a version of a closed loophole that puts Hill's vision into practice. Of the proposals on the table today, none include a nuanced, phased-in timeline that would give districts this flexibility (that said, some do delay accountability for implementation for several years). How would it look? A trigger that only requires actual teacher salaries to be included after 3 years of nonfederal budget growth in a given district? After a certain amount of budget growth? It would be complicated and difficult for districts to predict. But with enough communication, it might be the most effective way to make this change.

My recommendation section beginning on page 39 outlines one possible solution. But before presenting that solution, it is worth noting that this entire conversation is premised on the idea that our current teacher salary structure (based almost entirely on seniority) is untouchable. It is certainly arguable that this seniority-based pay system should be changed. Further research should look more deeply into the likely effects of changing teacher pay scales on the comparability debate.

So long as seniority remains the driving factor in teacher pay, if the loophole is closed, districts will be required to either force or incentivize experienced teachers into high-needs schools or freeze hiring at non-Title I schools, put all new-teacher slots into high-needs schools, and increase the perks at those schools so that the new teachers do not feel the desire to leave as soon as they earn that option. This would result in larger class sizes for the veteran teachers in low-need schools. This, of course, is often prohibited by union contracts.

Closing the loophole might give districts looking to change employment practices a bargaining chip at the union negotiating table. District negotiators could say, "We have to meet this federal requirement. We aren't allowed to force teachers to move, so we either change salaries such that those willing to teach in high-needs schools get paid more or hire more of these low-paid teachers in Title I schools and give them smaller class sizes. If we take this second option, we might also need to spend more on support for our teachers in high-need schools so that we make it worth their while to stick around and draw higher salaries to these schools in a way that evens out today's spending gaps." This could substantially change the conversation at the bargaining table.

The data presented in the first half of this paper are compelling—it seems that if it is administratively feasible, it is worth making this change. But it is important to walk through the possible substantive drawbacks as well, before turning directly to my recommendation. The next section does just that.

# Substantive concerns with closing the loophole

Is it fair to talk about this as a loophole? Doing so implies that Congress intended comparability to mean comparable services in terms of dollars, including actual teacher salaries, and that this intent has been circumvented by practitioners or executive agencies trying to preserve the status quo or get around the congressional desire for equal services.

Yet the statute itself explicitly disallows the inclusion of salary differences based on years of experience in comparability calculations. <sup>61</sup> In 1970 when the Office of Education (the precursor to the Department of Education) issued regulations implementing the new comparability requirement, it included five measures of comparability that districts had to meet. One of them was instructional salaries, less longevity, per pupil. 62 In subsequent reauthorizations, Congress did nothing to disallow this implementation choice.

This all indicates that Congress generally intended to sanction (or, at least, to not prohibit) teacher salary differentials between Title I and non-Title I schools so long as the differential was due to experience. This does not make it wise policy, but it does make the widely popularized "loophole" term inaccurate. Nonetheless, I use the terminology throughout the paper because it is now a common expression in education circles that stands for disallowing district policies that turn a blind eye to experience-based salary differentials.

Why did Congress write the law this way? Are there substantive arguments for maintaining the status quo? Are there good arguments against closing the loophole? Two such arguments deserve discussion. The first is that teacher experience is not important in the quality of education, and that spending differences due primarily to experience-related salary differentials should therefore not be considered inequitable. The second is that by forcing within-district inequity to be reduced, we might actually increase total inequity by exacerbating betweendistrict variance in spending. Let's look at each of these arguments in turn.

### The assumption that teacher experience matters

Does a teacher's years of experience in the classroom really affect his or her students? It only makes sense to fight for closing the loophole if we think that the current distribution of experience (veterans in low-needs schools and beginners in high-needs schools) is problematic.

Eaves of the Houston Independent School District made the common argument against this assumption eloquently:

You can have a beginner teacher [who is] so fired up—just going great guns. And you can have people with 25 years [experience] who are finally getting to the point in their careers where they're just tired ... and are those teachers' higher salaries necessarily going to drive success [for those high-need students]? Because I thought that's what we were all about, trying to make sure the students are successful and have the highest quality teacher.

Ferris at Education Resource Strategies is not particularly sympathetic to this line of thinking. "We know that experience is a fairly reasonable proxy for effectiveness," she says. Current policies have created a "maldistribution of teachers," she continues—it's a system that leads to a distribution of teachers that is exactly "opposite of what you'd want them to be," from an equity perspective.

Education policy research partially confirms Ferris's assertion. Research shows, for instance, that "inexperienced teachers (those with less than three years of experience) are typically less effective than more senior teachers," although "the benefits of experience appear to level off after about five years."63 It is worth noting that these studies are based on limited data: Most researchers base their work on student achievement on standardized tests, which are incomplete measures of the extent to which students gain the skills and knowledge they're meant to gain in school.

Where do brand-new—and therefore less-effective—teachers tend to cluster? They land in the high-minority, hard-to-staff schools that are the focus of this report (and, of course, in high-poverty schools that often, but not always, are the same schools).<sup>64</sup> This is largely because of higher turnover rates in these schools. "Schools with greater proportions of minority students [have] greater difficulty retaining teachers than ... low-minority schools," says Cassandra Guarino of the RAND Corporation.<sup>65</sup> Nonwhite and poor students attend schools with less-qualified and less-experienced teachers.66

The takeaway here: Eaves is right that the salary difference between a teacher with five years of experience and a teacher with 20 years of experience is often bigger than the effectiveness differential between those two teachers, but there is a real difference in effectiveness between a first- or second-year teacher and that teacher in her 10th year. To the extent that the loophole is allowing districts to count a school with entirely first- and second-year teachers as "comparable" to one with more experienced staff, it is harming students at the former school by providing them with lower-quality educational opportunities.

### An unintended consequence: Increasing total per-pupil spending variance

Finally, it is important to recognize one unintended consequence of closing this loophole: It will probably slightly increase total variance in per-pupil spending. Here's why. If the federal government makes this change and forces districts across the country to pull their lowest-spending schools up to their district average, then high-spending districts will have even higher spending averages, and lowerspending districts won't be able to compete. In other words, it is likely to increase spending variations between high- and low-spending districts even though withindistrict variance decreases.

Nationally, my model predicts that closing the loophole will increase variance by about 0.5 percent (compared to a no-fix scenario with the same increased spending). This is a fairly small problem. But in some states the change is bigger. In California, for instance, the model predicts an increase in per-pupil spending variance between schools of about 5 percent. This is not surprising, since Figure 2 on page 15 shows that 87 percent of California's current variance is due to betweendistrict discrepancies. There are already big differences between rich and poor districts—closing the comparability loophole without also making other reforms in California will exacerbate the problem.

One way to avoid this undesirable increased variance is to advocate for closing the loophole without any new money. If we required districts to redistribute what they have now, the between-district variance would not increase.

But there are real political problems with that approach. As Education Resource Strategies's Ferris points out, school districts are fighting to keep white, middleclass families invested in the public education system. Closing the loophole in any way other than leveling up "seems like [it carries] a significant danger of causing a huge uproar and exodus of the middle class"—especially when you tell them, "Sorry, but we're going to take away several of your teachers because they are too expensive. Either your class sizes are going way up next year, or we're giving you a bunch of novice teachers."

Ferris thinks that this kind of change would "make big news." She believes "middleclass families around the country would be likely to say, 'I see the writing on the wall, and this is not good for my kid, I'm getting him out of here." And that, of course, would have major budget implications for school districts across the country.<sup>67</sup>

It is not clear just how big a problem this would be. The reason: Too few districts have tried to equalize spending based on actual teacher salaries, so we have extremely limited information about political pushback or responses from middleclass families. But this potential political concern is one substantive reason we should phase this change in as the economy begins to improve, thereby avoiding taking anything away from some schools and instead simply directing new money to the higher-need schools. In other words, even if it slightly increases betweendistrict variance, it is smarter to close the loophole via new money. Leveling up avoids the political and policy problems involved with forcing teacher transfers.

Further, we should only dislike any variance in spending—whether within or between districts—to the extent that it harms students who need the most assistance to succeed. My earlier analysis shows that students of color and students living in poverty are generally helped by this policy change, not hurt.

Nonetheless, this finding—that between-district variance increases in some states when the loophole is closed—is important. It points to the problem with any onesize-fits-all national policy as applied to 50 very different state education finance systems and that of the District of Columbia. We cannot achieve equitable—or even equal—spending without making reforms at the district, state, and federal levels. Comparability reform is a good first step but will certainly not fix the problem.

# Recommendation: Close the comparability loophole gradually

There is no question that we should change this policy. Even if Congress originally intended to exclude differences in teacher salaries due to years of experience from comparability calculations, education research has evolved since 1965. We now know that teachers are not widgets. We know that allowing brand-new teachers to be aggregated in schools with high concentrations of minority students, while not simultaneously providing these new teachers with effective support, is likely to perpetuate racial achievement gaps that have plagued our country for far too long.

We know, in short, that allowing the comparability loophole to remain is a recipe for disaster, especially as minority students become an ever-larger part of our nation's school population. Unlike so many social science problems, this one comes with a fairly obvious policy lever to pull.

The analysis in this paper provides reason to believe that effectively closing the comparability loophole will lead to substantial improvement in education spending practices for students of color. The same moral imperative that demands this change, however, demands that we do it carefully. The end goal isn't a change in federal law—it's a change in actual dollars spent in schools serving students of color. If we force a change in federal law without adding technical support, phase-in time, and reasonable new funding, then it will be a policy change that simply does not get implemented. It would become just another federal mandate that district administrators across the country roll their eyes at, destined to be thrown in the pile of unattainable requirements in which "100 percent proficient by 2014" currently lies.

Lawmakers working to reauthorize the Elementary and Secondary Education Act should phase in this change over time. In the first year, school districts should be required to continue meeting today's comparability requirement and also report per-pupil spending by school calculated with real teacher salaries. Starting in year two, districts should be told that to get Title I funds, they must spend all new state and local money (anything above their spending level the prior year) in schools that would fail under a closed-loophole requirement.

The end goal isn't a change in federal law—it's a change in actual dollars spent in schools serving students of color.

Finally, in phase three, a new version of the comparability requirement that closes the loophole entirely should kick in:

- Title I schools must receive at least as much as the average non-Title I school.
- Spending must be calculated using actual teacher salaries.
- Comparisons must be made within school-level categories (elementary, middle, and high schools).
- If all schools are Title I schools, then those in the highest two quintiles of poverty must have per-pupil spending at least as much as the average for those in the lowest two quintiles of poverty.

The trickiest question is when the third phase should begin. From 1972 to 2004 state and local spending on kindergarten-through-12th-grade education grew at approximately 2.4 percent annually.<sup>68</sup> Given that school districts do not control the way states allocate money, it is unrealistic to think that the entire 2.4 percent of growth would be able to be spent toward closing this loophole. If states did not change spending patterns at all, and only half of the new funding (which is approximately the local government's share, or the amount that districts can control) were used for this purpose, then it would take approximately four years to get to a point where the federal government could require the loophole be closed by leveling up—that is, without forcing teacher transfers.

This timeline for spending growth is far from certain, especially in the current economy, but Los Angeles School District's Hill is right that a recession is a perfect time to do the political work required to make this change so that it can be implemented as soon as budgets start to grow again. Assuming that the Elementary and Secondary Education Act is not reauthorized until at least two years into the next presidential term and that the economy continues to recover until then, it is reasonable to adopt the following timeline:

- **Phase 1:** Reporting starts immediately
- Phase 2: New money requirements start in year two
- Phase 3: Closed loophole starts in year five

Requiring districts to account for actual spending decisions is honest and responsible. It sends a message that we should not lie to kids and parents about which schools we're spending more money on and thus prioritizing.

But it is not the only thing we should do. The new data that underpin the recommendations in this paper show that many states still have vast inequities in spending between school districts even if they resolve the within-district variance problems. The federal government could turn its focus to this problem, as well, if the political will existed. Congress could require states to show progress toward eliminating between-district spending disparities before giving Title I funds to any of that state's districts, for instance.

A good first step is to ensure that within the smallest unit of education governance the local school district—schools serving students of color and poor students are getting their fair share of the nonfederal dollars spent each year. Closing the comparability loophole would not fix everything that ails our schools or even close the spending gap that exists between white students and nonwhite students. But it would be a big step in the right direction.

We are far from making public education into a right "made available to all on equal terms," as the Supreme Court demanded in Brown v. Board of Education in 1954.<sup>69</sup> Any real solution will focus on more than just funding reallocation. It must include plans to integrate our public schools in a meaningful way. But closing the comparability loophole would be real progress.

# **Appendix**

#### The new dataset

The school-level expenditure data reported by districts to states in 2009 and by states to the Department of Education in 2010 are the source data for this report. There are a few important limitations to the use of these data. First, it reports spending in 2008–09, but the districts did not know they would need to collect these data until the end of 2009. This "post hoc" data collection created some concern about the accuracy of the data that districts had to recreate from systems that might not have been designed to track expenditures in the ways the Department of Education asked for it. "After reviewing this issue," the department explains, it "concluded that school districts usually do have data systems that can" be used to extract school-level expenditures on real salaries.<sup>70</sup>

The purpose of this data collection was to analyze state and local spending on general education in districts receiving Title I funds. This means that some big categories of spending were excluded, among them all federal dollars, expenditures on special education, adult education, school nutrition programs, summer school, preschool, and employee benefits (other than salaries).<sup>71</sup> For these reasons, the average reported per-pupil spending across the country—\$4,395—is substantially lower than the \$10,441-average per-pupil expenditure that the National Center for Education Statistics reports for 2007–08.<sup>72</sup>

Further, this dataset covers only schools in districts that receive Title I funds, or about 96 percent of all districts. New Jersey was excluded from the entire analysis because it mistakenly included federal spending in its report.

The U.S. Department of Education reports each school's spending in two primary categories: total personnel and total nonpersonnel. It then breaks the personnel category into two subcategories: salaries for instructional staff and salaries for teachers.<sup>73</sup> I combine these into a new measure that forms the basis of my analysis: total expenditures at each school. While this aggregation loses some detail, running the analyses separately for personnel-only data did not change the results in any meaningful way; the total expenditure category is easier to comprehend.

To analyze race-based spending patterns, I add student enrollment demographic data from the Department of Education's Common Core of Data file for 2008–09. I create a "students of color" category that combines all students not identified as white.

In order to make national comparisons, I adjust the spending data using the district level 2009 Comparable Wage Index developed by Dr. Lori Taylor at Texas A&M University.<sup>74</sup> The index "is a measure of the systematic, regional variations in the salaries of college graduates who are not educators. It can be used by researchers to adjust district-level finance data at different levels in order to make better comparisons across geographic areas."75 I use adjusted data when I make between-district and national calculations, but not when I make within-district calculations.

The Department of Education cautions that researchers should be wary of using these data to draw conclusions about between-district variation or national averages: To ease the data collection burden for states, the department allowed some variation in how expenditure categories were defined.

Despite taking this concern seriously, this report does use the data to paint a national and state-by-state picture. This is the first time actual school-level salary data has been collected on a national scale. Similar to any new data collection, there were will be certain validity questions raised about the accuracy of reporting and measurement. But it would be a missed opportunity not to use them—less-than-perfect data is better than no information at all. Further, there is no reason to suspect a pattern of reporting inconsistencies that would skew the data in any particular direction.

Nonetheless, this lack of complete confidence in the underlying data calls for further research using data collected with more advanced notice to districts and more consistency in reporting. Since this first round of American Recovery and Reinvestment Act data was released, the department's Office for Civil Rights released a new set of finance data containing similar information for 2009–10.76 This will be reported into the foreseeable future as part of their biannual civil rights data collection. Starting in 2011–12 the collection will eliminate the discrepancies that the Department of Education allowed districts to use in reporting expenditures. Education researchers should make heavy use of this rich new data to tell the stories of inequities in public education spending, both nationally and in specific states and districts.

### About the author

Ary Spatig-Amerikaner has a law degree from the University of California, Berkeley, and a master's degree in public policy from the Goldman School of Public Policy at the University of California, Berkeley. She previously worked as a legislative assistant for education policy for Rep. Mazie Hirono (D-HI); as a research assistant at the Urban Institute's Education Policy Center; and as a legal intern for the Department of Justice's Civil Rights Division and Public Advocates, Inc.

The author conducted this study as part of the program of professional education at the Goldman School of Public Policy. A version of this paper was submitted in partial fulfillment of the course requirements for the master's degree in public policy. The judgments and conclusions are solely those of the author and are not necessarily endorsed by the Goldman School of Public Policy, by the University of California, or by any other agency.

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### Endnotes

- 1 Brown v. Board of Education, 347 U.S. 483, 492 (1954)
- $2\,$  Gary Orfield, "Reviving the Goal of an Integrated Society: A 21<sup>st</sup> Century Challenge" (Los Angeles: The Civil Rights Project/Proyecto Derechos Civiles at UCLA, 2009).
- 3 Ibid.
- 4 Kimberly Jenkins Robinson, "Resurrecting the Promise of Brown: Understanding and Remedying How the Supreme Court Reconstitutionalized Segregated Schools," North Carolina Law Review 88 (787, 793) (2010) (citing James Ryan, "The Real Lessons of School Desegregation." In Joshua M. Dunn and Martin R. West, eds., From Schoolhouse to Courthouse: The Judiciary's Role in American Education (Washington: Brookings Institution Press, 2009).
- 5 Eric Hanushek, "The Impact of Differential Expenditures on School Performance," Educational Researcher 18 (4) (1989): 45-62.
- 6 Education Trust, "The Funding Gap 2006" (2006), available at http://www.edtrust.org/sites/edtrust.org/files/ publications/files/FundingGap2006.pdf.
- 7 Ann Chih Lin and David R. Harris, "The Colors of Poverty: Why Racial and Ethnic Disparities Persist" (Ann Arbor, Michigan: National Poverty Center, 2009) available at http://www.npc.umich.edu/publications/policy\_briefs/ brief16/PolicyBrief16.pdf.
- 8 This is only an approximation because the number of districts not meeting a stricter comparability requirement is based on the Department of Education 2009 expenditure dataset that excludes New Jersey because New Jersey did not correctly report its information.
- 9 Throughout the text of this paper I report differences that are statistically significant—i.e., they have p-values less than 0.05. This dataset is almost the entire universe of schools, so statistical significance is of limited importance. The more interesting conversations are about whether these differences are significant in the real world. Throughout the paper I attempt to translate per-pupil spending differences into more meaningful evidence of inequity by providing examples of things that could be purchased with that money.
- 10 National Center for Education Statistics, Digest of Education Statistics 2010 (U.S. Department of Education, 2009), table 80, available at http://nces.ed.gov/ programs/digest/d10/tables/dt10\_080.asp.
- 11 This money would cover teachers' salaries—not their benefits. But this is an appropriate calculation because the underlying data excludes expenditures on benefits, as well. The shortfalls in spending that this paper documents are explicitly shortfalls in salaries.
- 12 General regression of adjusted per-pupil spending on percent of student body that is nonwhite. No additional variables controlled for.
- 13 "Diplomas Count 2011," Education Week 30 (34): 23.
- 14 This dramatic difference is statistically significant but should be interpreted with caution since there are only 39 schools serving at least 90 percent white students in California, compared to 2,691 serving at least 90 percent nonwhite students.

- 15 These are results from t-tests comparing mean per-pupil spending in (1) schools with more than 90 percent students of color and all other schools, and (2) schools with more than 90 percent of students of color and schools with more than 90 percent white students.
- 16 Ibid.
- 17 National Center for Education Statistics, Digest of Education Statistics 2010, table 80
- 19 Education Trust, "The Funding Gap 2006."
- 20 A discussion of how and why the relationship could get worse is below. The short version is that leveling up spending can actually increase variation in per-pupil spending between districts.
- 21 I focus on Texas but not California here because there are so few schools with more than 90 percent white students in California that the numbers are not reliable.
- 22 New teachers in Texas are paid \$39,150, and those with 11 or more years of experience on average earn \$47,110. National Center for Education Statistics, Digest of Education Statistics 2010, table 80.
- 23 Toshiba's notebook starts at \$270, and certainly schools can get deals to find better laptops for less than \$320 each. "Toshiba Mini NB505-N508BL 10.1" Widescreen Netbook," available at http://us.toshiba.com/computers/laptops/mini-notebook/NB500/NB505-N508BL (last accessed August 2012).
- 24 National Center for Education Statistics, Digest of Education Statistics 2010, table 80.
- 25 Kristen Ferris, personal phone interview with the author, February 23, 2012
- 26 Matthew Hill, personal phone interview with the author, March 19, 2012
- 27 A self-described "non-profit organization that works with large urban school systems to transform their resource use to dramatically improve student learning." "What We Do: About ERS," available at http://erstrategies.org/about/ (last accessed August 2012).
- 28 Sharon Eaves, personal phone interview with the author, March 20, 2012
- 29 Robert Campbell, personal phone interview with the author, March 12, 2012
- 30 The Fiscal Fairness Act, HR1294 and S701, 112th Cong. 1st sess., section 3(c)7: "No Forced Transfers," available at http://thomas.loc.gov/cgi-bin/query/z?c112:H.R.1294:.
- 31 Campbell, personal interview with the author.
- 32 Eaves, personal interview with the author.
- 33 Hill, personal interview with the author.
- 34 Elementary and Secondary Education Act of 1965, section 1120A(c)2(B)
- 35 Roza, "How Districts Shortchange Minority and Low Income Students\*

- 36 Linda Darling Hammond, "Teacher Quality and Student Achievement: A Review of State Policy Evidence" (Seattle: University of Washington Center for the Study of Teaching and Policy, 1999); Jonah E. Rockoff, "The Impact of Individual Teachers on Student Achievement Evidence from Panel Data." American Economic Review 94 (2) (2004): 247-252, available at http://pubs.aeaweb. org/doi/pdfplus/10.1257/0002828041302244.
- 37 Heather Peske and Kati Haycock, "Teaching Inequality: How Poor and Minority Students Are Shortchanged on Teacher Quality" (Washington: Education Trust, 2006), available at http://eric.ed.gov/PDFS/ED494820.pdf.
- 38 Cassandra Guarino, Lucrecia Santibanez, and Glenn Daley, "Teacher Recruitment and Retention: A Review of Recent Empirical Literature," Review of Educational Research 76 (2):173-208, available at http://www. montana.edu/econ/gilpin/502/guarinoetal2006.pdf.
- 39 Hamilton Lankford, Susanna Loeb, and James Wyckoff, "Teacher Sorting and the Plight of Urban Schools: A Descriptive Analysis," Educational Evaluation and Policy Analysis 24 (1): 37-62, available at http://www.stanford. edu/~sloeb/papers/TeacherSorting.pdf.
- 40 It is possible that this analysis is too cynical—that communities across the country are ready to have (or already having) the tough conversations about distribution of teachers and resources in tough economic times, and that it is not causing flight from public schools. I have not done substantial research on how white middle- and upper-class families historically respond to progressive education reforms. However, the move toward private schools after desegregation provides some evidence that our history is not encouraging in this realm.
- 41 Sheila Murray, Kim Rueben, and Carol Rosenberg, "State Education Spending: Current Pressures and Future Trends," National Tax Journal (2007): 330, available at http://www.urban.org/UploadedPDF/1001132\_state\_ education\_spending.pdf.
- 42 Brown v Board of Education
- 43 Heuer and Stullich, "Comparability of State and Local Expenditures Among Schools Within Districts: a Report from the Study of School-Level Expenditures."
- 44 Ibid.
- 45 National Center for Education Statistics, Digest of Education Statistics 2010 (U.S. Department of Education, 2010), table 190, available http://nces.ed.gov/ programs/digest/d10/tables/dt10\_190.asp.
- 46 Heuer and Stullich, "Comparability of State and Local Expenditures Among Schools Within Districts: a Report from the Study of School-Level Expenditures."
- 47 Lori Taylor, Comparable Wage Index (College Station, Texas: Texas A&M University, 2012). Data on file with
- 48 Lori Taylor and William Fowler, "Datafile: NCES Comparable Wage Index" (Washington: National Center for Education Statistics, 2007), available at http://nces. ed.gov/pubsearch/pubsinfo.asp?pubid=2007397. The National Center for Education Statistics published the CWI from 1997 to 2004. The 2009 version used in this paper is not published or supported by the National Center for Education Statistics but uses the same methodology.

- 49 "Civil Rights Data Collection," available at http://ocrdata. ed.gov/ (last accessed August 2012).
- 50 Toshiba's notebook starts at \$270, and certainly schools can get deals to find better laptops for less than \$320 each. "Toshiba Mini NB505-N508BL 10.1" Widescreen Netbook," available at http://us.toshiba.com/computers/laptops/mini-notebook/NB500/NB505-N508BL (last accessed August 2012).
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- 58 Campbell, personal interview with the author.
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- 61 Elementary and Secondary Education Act of 1965, section 1120A(c)2(B)
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- 67 It is possible that this analysis is too cynical—that communities across the country are ready to have (or already having) the tough conversations about distribution of teachers and resources in tough economic times, and that it is not causing flight from public schools. I have not done substantial research on how white middle- and upper-class families historically respond to progressive education reforms. However, the move toward private schools after desegregation provides some evidence that our history is not encouraging in this realm.
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- 71 Ibid.

- 72 National Center for Education Statistics, Digest of Education Statistics 2010 (U.S. Department of Education, 2010), table 190, available http://nces.ed.gov/ programs/digest/d10/tables/dt10\_190.asp.
- 73 Heuer and Stullich, "Comparability of State and Local Expenditures Among Schools Within Districts: a Report from the Study of School-Level Expenditures."
- 74 Lori Taylor, Comparable Wage Index (College Station, Texas: Texas A&M University, 2012). Data on file with author.
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- 76 "Civil Rights Data Collection," available at http://ocrdata. ed.gov/ (last accessed August 2012).

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