Center for American Progress

Comparable but Unequal

School Funding Disparities

By Robert Hanna, Max Marchitello, and Catherine Brown March 5, 2015

In 1954, the U.S. Supreme Court made clear with its *Brown v. Board of Education* decision that education "must be made available to all on equal terms."[1] Sixty years later, that promise remains unfulfilled. Millions of students—largely low-income students and students of color—continue to attend segregated and economically isolated schools.[2] State and district school finance systems perpetuate and compound these inequities by providing less money to students with the greatest need.

Federal law—through Title I, Part A, of the Elementary and Secondary Education Act, or ESEA—attempts to ameliorate these disparities. It requires school districts to provide "comparable" educational services in high-poverty and low-poverty, or non-Title I, schools as a condition of receiving Title I dollars.[3]

But the devil, as always, is in the details. Under current law, districts can compute comparability using average teacher salaries or teacher-to-student ratios instead of actual expenditures on teacher salaries.[4] And because teacher salaries constitute the largest proportion of school budgets and teachers with greater experience earn higher salaries and tend to teach in lower-poverty schools, this compliance method renders it impossible to accurately compare school budgets.

This problem is not an oversight. Federal law explicitly prohibits districts from calculating comparability using actual expenditures. Instead, it chooses to treat teachers as interchangeable widgets. For example, if School A has 10 teachers and School B has 10 teachers, they must be providing a comparable education. It is this loophole in federal law—the "comparability loophole"—that is at the heart of school funding inequities.

But research over the past decade has conclusively shown that all teachers are not equal.[5] Some have a vastly greater impact on student achievement than others. In fact, a recent RAND Corporation report stated, "among school-related factors, teachers matter most."[6] And while experience is not a perfect proxy for effectiveness, research consistently shows that teachers undergo a steep learning curve during the first three years on the job and then gradually reach a peak in their fifth year.[7] Consequently, it is particularly problematic

that schools disproportionately serving low-income students also have more than their fair share of new teachers. Additionally, though individual teacher effectiveness varies, schools with more new teachers are, on average, not comparable to schools with more experienced teachers.

Ensuring that Title I funds provide additional funds for disadvantaged students is not a small issue. Indeed, it goes to the heart of the American promise of equal opportunity: No matter your background or family circumstance, you have a shot at a middle-class life if you work hard and get a good education. While money is not the only driver of a high-quality education, research shows that money really matters for disadvantaged students.

A recent National Bureau of Economic Research study found that:

> *For poor children, a twenty percent increase in per-pupil spending each year for all 12 years of public school is associated with nearly a full additional year of completed education, 25 percent higher earnings, and a 20 percentage-point reduction in the annual incidence of poverty in adulthood. … The results … highlight how improved access to school resources can profoundly shape the life outcomes of economically disadvantaged children, and thereby significantly reduce the intergenerational transmission of poverty.*[8]

The comparability requirement in ESEA is the mechanism through which the federal government can ensure that the public education offered to poor students is at least as well resourced as that offered to their more affluent peers. By allowing districts to use measures of educators instead of expenditures to demonstrate that they are providing comparable educational services, federal law ceases to have teeth. This is commonly referred to as the comparability loophole.

Effects of the comparability loophole

To determine the scope and depth of the funding inequity between higher- and lower-income students, we analyzed the most recent available data from the U.S. Department of Education, or DOE, on how much districts spend on each of their schools. The DOE collected this information on more than 95,000 public schools through its Civil Rights Data Collection during the 2011-12 school year.[9] We compared how districts fund schools that are eligible to receive federal Title I dollars with other schools in their grade span—elementary, middle, or high school grades[10]—and found vast disparities throughout the country in how districts spend state and local dollars on Title I schools. Whenever possible, we compared Title I schools with non-Title I schools in each grade span. In other cases, we compared higher-poverty Title I schools with other Title I schools.[11] We adjusted school spending for differences in cost of living across districts.[12]

Nationally, we found that:[13]

- **Due to the loophole in federal law, more than 4.5 million low-income students attend inequitably funded Title I schools.** In most states, there are tens of thousands of students from low-income households who attend Title I schools that are not funded equitably relative to other schools in their district. See the appendix for state-by-state results.

- **These inequitably funded schools receive around $1,200 less per student than comparison schools in their districts.** Overall, these schools receive around $668,900 less per year than comparison schools. In Fort Worth, Texas, for example, inequitably funded Title I schools receive around $2,600 less per student. In some districts, the disparities are even wider. In Santa Fe, New Mexico, inequitably funded Title I schools receive around $4,900 less than other schools. These disparities can add up to millions of dollars at the state level. If these gaps were closed, inequitably funded schools in Texas would receive another $1.6 billion annually, and in New Mexico, they would have an additional $65 million. See the appendix for state-by-state results.

- **If the federal loophole were closed, high-poverty schools would receive around $8.5 billion in new funds each year.** This estimate is similar to findings reported in a previous study that used 2008-09 school finance data, also based on information collected by DOE.[14] This amount is equivalent to around 1.5 percent of total state and local revenues, which were more than $500 billion in the 2011-12 school year.[15] For inequitably funded Title I schools, these dollars could add real value. See appendix for state-by-state results.

As Congress works to reauthorize the No Child Left Behind Act, improving school funding has been a key focus. Sen. Lamar Alexander (R-TN), chairman of the Senate Health, Education, Labor and Pensions Committee, and Rep. John Kline (R-MN), chairman of the House Education and Workforce Committee, both proposed changing the distribution of Title I funds.[16] This would allow states the option of distributing funds solely on the basis of the number of low-income students, rather than continuing to use the four formulas that target the funds to concentrations of poor students. Moreover, both of their proposals fail to address the comparability loophole and would continue to allow districts to demonstrate comparability in ways that mask real inequities in school resources. Members of the House Education and the Workforce Committee recently approved Rep. Kline's proposal.[17]

What could $668,900 buy?

Comparability is about a broad range of resources. Title I schools should at least have the same amount of resources—to invest as school leaders see fit—as other schools. They may choose to hire more experienced, and thus more costly, teachers, or they may choose to invest in technology, a new curriculum, an after-school program, or teaching supplies. If shortchanged schools received an additional $668,000, they could do one of the following:[18]

- Purchase new MacBook Pro computers for more than 550 students[19]
- Construct six new libraries[20]
- Implement a new music education program that serves more than 3,500 students[21]
- Institute a new arts program covering more than 190 classrooms[22]
- Hire 12 new guidance counselors with an average salary of nearly $54,000[23]
- Give a $10,000 bonus to more than 60 teachers

This paper is not the first to point out this issue of comparability. The fiscal inequities perpetuated by the comparability loophole are well documented. In a DOE national study of school finance during the 2008-09 school year, the department looked at differences in spending between schools in the same districts and found that about 40 percent of Title I schools were underfunded relative to non-Title I schools.[24] In 2012, the Center for American Progress issued its "Unequal Education" report, which analyzed the first wave of DOE per-school expenditure data that included actual teacher salaries. It found that children of color are routinely being shortchanged.[25] CAP has long argued that the loophole is one of the most significant barriers to educational equity.[26] Other groups such as The Education Trust and the New America Foundation have also analyzed the impact of the loophole and found that districts claiming comparability significantly underfund higher-poverty schools.[27]

It is important to note that districts reported their own financial information for the Civil Rights Data Collection, or CRDC. Districts might have chosen somewhat different approaches to completing the financial survey. The CRDC focuses on expenditures from state and local funds. School-level financial data is already scarce, but this focus on state and local resources makes it difficult to cross-validate these school-level findings even with available state-level school finance results.

Although legally comparable, schools can still have large funding inequities

The following is an example of how the comparability loophole permits school funding inequities to persist. The schools are hypothetical, reproduced from a Center for American Progress video released in 2011.[28]

	West Dillon Elementary	East Dillon Elementary
School type	Non-Title I	Title I
Number of students	200	200
Number of teachers	10	10
Average teacher salary	$65,000	$45,000
Total expenditures	$1,300,000	$900,000
Per-pupil expenditures	$6,500	$4,500

In this scenario, each school serves the same number of students with the same number of teachers. Each teacher is paid according to a district-wide salary schedule. In West Dillon, the average teacher has 20 years of experience, while teachers in East Dillon are much less experienced. According to the law, these schools are comparable. But in actuality, the Title I school receives $400,000 less overall in state and local funds or $2,000 less per pupil.

Recommendations

To ensure that low-income schools are funded at equal levels with their more affluent counterparts, Congress should update the law and close the comparability loophole in the following three ways:

1. The comparability calculation must be based on actual expenditures, including actual teacher salaries.

2. Districts should be required to achieve comparability between Title I and non-Title I schools only by demonstrating that Title I schools receive state and local funding that is at least equal to the average of the district's non-Title I schools.

3. Districts that serve only Title I schools must show that higher-poverty schools receive no less than the average total of state and local funds for lower-poverty schools.[29]

Under current guidance from the U.S. Department of Education, districts can demonstrate comparability at the 90 percent level.[30] In other words, districts can claim that they spend comparable amounts at Title I schools as long as those schools provide at least 90 percent of services offered in other schools. Districts can interpret that percentage as a ceiling not a floor. The department's guidance should not allow for this amount of leeway.

Some have argued that the only way for districts to close the comparability gap is to force experienced teachers to transfer to high-poverty schools, which typically employ teachers with fewer years of experience and lower salaries. In fact, states and districts could provide a host of additional resources to the high-poverty schools and leave the staffing distribution as is. By purchasing the kind of enrichment activities listed in the "What could $668,900 buy?" text box above, districts would comply with the requirement.

In addition, districts could change their compensation systems to reward effectiveness instead of seniority or educational degree attainment.[31] In this way, districts can pay highly effective teachers more, particularly those working in schools serving high concentrations of low-income students. With more highly effective teachers clustered in high-poverty schools, these districts could close the comparability gap through supporting highly effective teachers in these schools rather than forcing teachers to move to high-poverty schools.

At the same time, actually achieving comparability given that schools have been inequitably funded throughout history will not be easy. That is why Congress should require meaningful compliance with the comparability provision to be phased in gradually. Priority would first be given to the schools that have been most egregiously shortchanged. Full compliance would be required within five years. The following timetable would serve that end:

- **Year one:** All districts must publicly report all expenditures by school level. These facts must be made available in an easy-to-read format that is available to the public. The report must also include the percentage of students eligible to receive free and reduced-price lunches. In each subsequent year, the district continues to report this data.

- **Year two:** States and districts begin to fill in funding gaps. States would rank their Title I schools by per-pupil expenditures and ensure that the lowest-spending 25 percent of schools are funded to at least 100 percent of the average level of their districts' comparison schools. These gaps could be closed through state or local actions or a combination of both.[32]

- **Year three:** States ensure that the lowest-spending 50 percent of Title I schools are funded to at least 100 percent of the average level of their districts' comparison schools.

- **Year four:** States ensure that the lowest-spending 75 percent of Title I schools are funded to at least 100 percent of the average level of their districts' comparison schools.

- **Year five:** States ensure that all Title I schools are funded at least to the level of the average of their districts' comparison schools.

Under current law, districts already risk losing their Title I dollars if they fail to comply with comparability requirements. Congress should expand this provision to hold states accountable for the gaps outlined above as well. Here, the guiding principle is that states hold the ultimate responsibility for operating inequitable funding systems. Specifically, states should risk losing their full allocation of Title I dollars each year that they fail to keep on track with the above timeline. This arrangement would be a strong deterrent to states and districts that wish to continue their current approaches to funding their most disadvantaged schools. Nationally, this amounts to a reasonable trade-off. For example, we found that in the second year—the first year of narrowing comparability gaps—states and districts would be responsible for closing gaps by around $2.3 billion in exchange for receiving more than $14.6 billion in federal Title I funds.

Conclusion

Students from economically disadvantaged backgrounds deserve the same opportunities at their peers from higher-income families. Notwithstanding the fact that comparability is the law of the land, the way districts comply with the provision undermines its true intent. Under the current fiscal policy, districts can spend less of their own state and local dollars on the schools with the highest needs, and most do spend millions of dollars less in these schools. Therefore, Congress should close the comparability loophole by requiring that districts fund their Title I schools at the same level as or higher than—based on actual spending—their other schools.

To truly address the problem of fiscal inequity, Congress must seize this opportunity to close the comparability loophole. An improved comparability provision could go a long way toward ensuring that all low-income students get their fair share of state and local funding.

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TABLE A1

Inequitably funded schools in the United States

State results from comparability analysis, school year 2011-12

	Estimated number of inequitably funded schools	Percent of schools in study	Estimated total number of low-income students in these schools	Percent of low-income students in study	Estimated amount of additional funding necessary to equitably fund these schools
Alabama	228	21%	91,597	27%	$159,000,000
Alaska	42	15%	9,067	24%	$14,300,000
Arizona	267	24%	145,792	37%	$143,000,000
Arkansas	68	13%	24,489	15%	$44,000,000
California	1,745	25%	421,529	34%	$885,000,000
Colorado	170	13%	57,219	19%	$73,200,000
Connecticut	181	22%	57,719	35%	$160,000,000
Delaware	33	21%	11,909	23%	$15,000,000
District of Columbia	20	17%	6,918	31%	$15,300,000
Florida	671	20%	360,346	25%	$313,000,000
Georgia	527	27%	284,453	34%	$297,000,000
Hawaii	82	29%	38,363	43%	$24,900,000
Idaho	97	23%	26,854	26%	$39,000,000
Illinois	738	28%	318,055	39%	$531,000,000
Indiana	265	21%	81,307	22%	$121,000,000
Iowa	103	16%	23,011	19%	$49,900,000
Kansas	121	16%	36,338	21%	$36,100,000
Kentucky	193	20%	63,619	22%	$130,000,000
Louisiana	273	26%	114,396	31%	$254,000,000
Maine	37	16%	661	16%	$21,700,000
Maryland	226	17%	85,308	24%	$119,000,000
Massachusetts	227	19%	67,992	26%	$111,000,000
Michigan	393	22%	111,652	26%	$254,000,000
Minnesota	95	12%	18,888	11%	$130,000,000
Mississippi	97	15%	40,656	17%	$65,300,000
Missouri	271	23%	71,359	27%	$230,000,000
Montana	33	17%	6,460	23%	$9,900,000
Nebraska	55	11%	10,224	10%	$17,700,000
Nevada	108	19%	67,358	29%	$53,000,000
New Hampshire	34	15%	3,948	12%	$12,800,000
New Jersey	355	23%	119,385	33%	$334,000,000
New Mexico	131	22%	53,036	27%	$90,700,000

	Estimated number of inequitably funded schools	Percent of schools in study	Estimated total number of low-income students in these schools	Percent of low-income students in study	Estimated amount of additional funding necessary to equitably fund these schools
New York	288	20%	69,417	24%	$140,000,000
North Carolina	281	13%	112,327	16%	$76,300,000
North Dakota	28	19%	4,131	24%	$13,900,000
Ohio	491	23%	132,181	27%	$944,000,000
Oklahoma	132	18%	51,965	22%	$45,100,000
Oregon	172	19%	50,030	21%	$47,700,000
Pennsylvania	491	24%	146,333	31%	$199,000,000
Rhode Island	49	20%	13,304	24%	$19,300,000
South Carolina	162	16%	66,735	19%	$87,000,000
South Dakota	54	19%	8,204	29%	$32,900,000
Tennessee	278	19%	121,713	25%	$99,900,000
Texas	1,402	26%	705,070	34%	$1,660,000,000
Utah	78	11%	32,316	14%	$40,300,000
Vermont	5	29%	871	32%	$1,200,000
Virginia	236	14%	76,939	18%	$95,200,000
Washington	237	15%	68,171	17%	$64,300,000
West Virginia	102	16%	24,311	18%	$32,200,000
Wisconsin	237	18%	57,106	22%	$64,600,000
Wyoming	60	26%	8,123	33%	$57,100,000
Total	**12,669**		**4,579,155**		**$8,473,800,000**

Source: U.S. Department of Education, "Civil Rights Data Collection," received by request; National Center for Education Statistics, *Public Elementary/Secondary School Universe Survey: v.1a* (U.S. Department of Education, 2011-12), available at http://nces.ed.gov/ccd/elsi/tableGenerator.aspx.

TABLE A2

Estimated number of districts with inequitably funded schools, by state

School year 2011-12

	Estimated number of school districts with inequitably funded schools	Percent of total districts in study
Alabama	51	68%
Alaska	11	79%
Arizona	60	67%
Arkansas	34	61%
California	342	73%
Colorado	42	72%
Connecticut	56	61%
Delaware	10	77%
Florida	50	93%
Georgia	80	84%
Idaho	28	72%
Illinois	183	64%
Indiana	92	66%
Iowa	42	54%
Kansas	42	64%
Kentucky	56	62%
Louisiana	34	69%
Maine	25	71%
Maryland	18	75%
Massachusetts	80	59%
Michigan	133	69%
Minnesota	46	55%
Mississippi	44	60%
Missouri	88	80%
Montana	19	56%
Nebraska	27	52%
Nevada	12	86%
New Hampshire	19	54%
New Jersey	133	67%
New Mexico	34	83%
New York	131	68%
North Carolina	58	73%
North Dakota	10	56%
Ohio	140	57%
Oklahoma	43	67%
Oregon	59	81%

	Estimated number of school districts with inequitably funded schools	Percent of total districts in study
Pennsylvania	172	73%
Rhode Island	18	72%
South Carolina	41	69%
South Dakota	28	65%
Tennessee	64	75%
Texas	237	81%
Utah	26	76%
Vermont	3	100%
Virginia	61	75%
Washington	83	67%
West Virginia	34	83%
Wisconsin	82	57%
Wyoming	21	95%

Note: The number of districts varies across states. For example, there were 24 regular school districts included from Maryland but 144 districts from Wisconsin. Consequently, comparing percentages across states in this table might not be appropriate. The results for Hawaii and the District of Columbia are not included as each only has one school district.

Source: U.S. Department of Education, "Civil Rights Data Collection," received by request; National Center for Education Statistics, *Public Elementary/Secondary School Universe Survey: v.1a* (U.S. Department of Education, 2011-12), available at http://nces.ed.gov/ccd/elsi/tableGenerator.aspx.

TABLE A3

Analytic sample for comparability analysis

School year 2011-12

	Total districts in study	Total schools in study districts	Total low-income students in study districts
Alabama	75	1,071	334,212
Alaska	14	272	37,142
Arizona	90	1,111	397,730
Arkansas	56	506	160,625
California	469	7,032	1,245,739
Colorado	58	1,275	297,295
Connecticut	92	807	166,366
Delaware	13	156	51,123
District of Columbia	1	115	22,610
Florida	54	3,384	1,470,650
Georgia	95	1,941	843,038
Hawaii	1	284	89,853
Idaho	39	424	101,393
Illinois	285	2,630	819,725
Indiana	140	1,282	373,497
Iowa	78	641	119,272
Kansas	66	744	171,189
Kentucky	91	964	285,754
Louisiana	49	1,066	374,481
Maine	35	226	4,244
Maryland	24	1,369	351,411
Massachusetts	136	1,220	263,697
Michigan	193	1,804	426,608
Minnesota	84	801	168,136
Mississippi	73	639	240,149
Missouri	110	1,158	260,842
Montana	34	192	28,268
Nebraska	52	507	98,422
Nevada	14	582	234,007
New Hampshire	35	234	32,346
New Jersey	200	1,549	366,991
New Mexico	41	594	197,724
New York	192	1,432	294,811
North Carolina	80	2,090	691,006
North Dakota	18	144	17,037
Ohio	246	2,103	493,482

	Total districts in study	Total schools in study districts	Total low-income students in study districts
Oklahoma	64	727	235,032
Oregon	73	923	241,515
Pennsylvania	237	2,062	469,909
Rhode Island	25	244	55,536
South Carolina	59	1,035	358,355
South Dakota	43	281	28,334
Tennessee	85	1,479	488,914
Texas	294	5,328	2,089,090
Utah	34	707	223,410
Vermont	3	17	2,707
Virginia	81	1,629	420,941
Washington	123	1,558	393,386
West Virginia	41	624	132,695
Wisconsin	144	1,334	261,748
Wyoming	22	231	24,866

Source: U.S. Department of Education, "Civil Rights Data Collection," received by request; National Center for Education Statistics, *Public Elementary/Secondary School Universe Survey: v.1a* (U.S. Department of Education, 2011-12), available at http://nces.ed.gov/ccd/elsi/tableGenerator.aspx.

Endnotes

1 *Brown v. Board of Education*, 347 U.S. 483 (1954), available at http://caselaw.lp.findlaw.com/scripts/getcase.pl?court=US&vol=347&invol=483.

2 Gary Orfield, John Kucsera, and Genevieve Siegel-Hawley, "E Pluribus…Separation: Deepening Double Segregation for More Students" (Los Angeles: The Civil Rights Project, 2012), available at http://civilrightsproject.ucla.edu/research/k-12-education/integration-and-diversity/mlk-national/e-pluribus...separation-deepening-double-segregation-for-more-students.

3 *No Child Left Behind Act*, § 1120A(c), "Comparability of Services," available at http://www2.ed.gov/policy/elsec/leg/esea02/pg2.html#sec1120A.

4 Ary Spatig-Amerikaner, "Unequal Education: Federal Loophole Enables Lower Spending on Students of Color" (Washington: Center for American Progress, 2012), available at https://www.americanprogress.org/issues/education/report/2012/08/22/29002/unequal-education.

5 Daniel Weisberg and others, "The Widget Effect: Our National Failure to Acknowledge and Act on Differences in Teacher Effectiveness" (Brooklyn, NY: The New Teacher Project, 2009), available at http://tntp.org/publications/view/the-widget-effect-failure-to-act-on-differences-in-teacher-effectiveness.

6 RAND Education, "Teachers Matter: Understanding Teachers' Impact on Student Achievement" (2012), available at http://www.rand.org/education/projects/measuring-teacher-effectiveness/teachers-matter.html.

7 The New Teacher Project, "Teacher Experience: What Does the Research Say?" (2012), available at http://tntp.org/assets/documents/TNTP_FactSheet_TeacherExperience_2012.pdf.

8 C. Kirabo Jackson, Rucker C. Johnson, and Claudia Persico, "The Effects of School Spending on Educational and Economic Outcomes: Evidence from School Finance Reforms." Working Paper 20847 (National Bureau of Economic Research, 2015), available at http://www.nber.org/papers/w20847.

9 Districts reported their own information to the U.S. Department of Education for this data collection. While the department provided specific guidance about what expenses to include and what not to include, it is probable that districts may have filled out these forms using slightly different analytic approaches. Given these data quality issues, we were not able to cross-reference the Civil Rights Data Collection with other school finance datasets. This is the most comprehensive database of its kind. If we assume that districts used similar accounting techniques for each of their schools, then our school-level comparisons should still represent disparities across schools in the same district. U.S. Department of Education, "Civil Rights Data Collection," received by request.

10 In many ways, we are indebted to Ary Spatig-Amerikaner for her 2012 CAP report using similar methods with 2008-09 school finance data. See Spatig-Amerikaner, "Unequal Education." In this brief, we compared Title I schools with the average for their grade span and indicated that a school was inequitably funded if its total spending per student was below the average. In grade spans with both Title I and non-Title I schools, we compared Title I schools with the non-Title I average. In grade spans with only Title I schools, we compared higher-poverty Title I schools with the average across lower-poverty Title I schools in their grade span. We followed the Fiscal Fairness Act's provisions: Higher-poverty schools are those from the top three quartiles of schools in terms of student poverty rates, and lower-poverty schools are from the bottom quartile. See *Fiscal Fairness Act*, H.R. 1294, 112 Cong. 1 sess. (Government Printing Office, 2011), 10b–c. We excluded all districts that did not receive any Title I dollars in 2011-12. See Bureau of the Census, *Public Elementary-Secondary Education Finance Data* (U.S. Department of Commerce, 2012), available at http://www.census.gov/govs/school/. We also did not include any district's grade spans that only include one school. We also dropped districts that served fewer than 100 students and districts that were irregular—for example, regional education agencies, all-charter agencies, or entities run directly by states. Finally, we dropped the spending outliers that were outside of the 1 percent to 99 percent range. Specifically, we dropped all schools that spent less than $1,626 per student or more than $35,385 per student. Throughout the paper, our comparisons are across grade spans—elementary, middle, and high school—but we omit the words "grade spans" for clarity.

11 This analysis relied on school-level data about students who are eligible for free or reduced-price lunches. See U.S. Department of Education, "Elementary/Secondary Information System," available at http://nces.ed.gov/ccd/elsi (last accessed February 2015).

12 We used Lori Taylor's Comparable Wage Index to adjust school-level spending for differences in cost of living. See Texas A&M University, "Extending the NCES CWI," available at http://bush.tamu.edu/research/faculty/Taylor_CWI/ (last accessed February 2015).

13 All of the following findings are based on the authors' analysis of U.S. Department of Education, "Civil Rights Data Collection."

14 Spatig-Amerikaner, "Unequal Education."

15 The total amount of state and local education revenue in 2011-12 was $542,823,200,000. Stephen Q. Cornman, "Revenues and Expenditures for Public Elementary and Secondary School Districts: School Year 2011-12 (Fiscal Year 2012)" (U.S. Department of Education, 2015), available at http://nces.ed.gov/pubs2014/2014303.pdf.

16 *Every Child Ready for College or Career Act*, forthcoming, 114 Cong. 1 sess., available at http://www.help.senate.gov/imo/media/AEG15033.pdf; *Student Success Act*, H.R. 5, 114 Cong. 1 sess. (Government Printing Office, 2015), available at https://www.congress.gov/bill/114th-congress/house-bill/5/text?q={%22search%22%3A%5B%22hr+5%22%5D}.

17 Education and the Workforce Committee, "Full Committee: H.R. 5 'Student Success Act,'" February 11, 2015, available at http://edworkforce.house.gov/calendar/eventsingle.aspx?EventID=398329.

18 The authors would like to acknowledge Jeanette Luna for research support for this text box.

19 According to the Apple website, a MacBook Pro costs around $1,199. See Apple Store, "MacBook Pro," available at http://store.apple.com/us-hed/mac (last accessed February 2015).

20 The Robin Hood Foundation offers libraries for schools at about $100,000 per campus. See NYC Department of Education, "Robin Hood Libraries" (2007), available at http://schools.nyc.gov/offices/d_chanc_oper/budget/dbor/allocationmemo/fy07_08/fy08_pdf/sam28.pdf.

21 According to a study by the National Association of Music Merchants, it costs districts about $187 per student to offer a "comprehensive K-12 music education program." See National Association of Music Merchants, "Study First to Detail the Costs of Comprehensive Music Education," Press release, August 28, 2012, available at https://www.namm.org/news/press-releases/study-first-detail-costs-comprehensive-music.

22 According to Urban Gateways, a foundation offering arts education enrichment programs, it costs around $34,000 to provide 12 classrooms with six artists for 24 sessions. See Urban Gateways, "Arts Ed Packages," available at http://urbangateways.org/programs/arts-ed-packages (last accessed February 2015).

23 According to the Bureau of Labor Statistics, the median salary of a guidance counselor is $53,610. See Bureau of Labor Statistics, " Occupational Outlook Handbook: School and Career Counselors," available at http://www.bls.gov/ooh/community-and-social-service/school-and-career-counselors.htm (last accessed February 2015).

24 Ruth Heuer and Stephanie Stullich, "Comparability of State and Local Expenditures Among Schools Within Districts: A Report from the Study of School-Level Expenditures" (U.S. Department of Education, 2011), available at http://www2.ed.gov/rschstat/eval/title-i/school-level-expenditures/school-level-expenditures.pdf.

25 Spatig-Amerikaner, "Unequal Education."

26 For example, see Raegen Miller, "Comparable, Schmomparable: Evidence of Inequity in the Allocation of Funds for Teacher Salary Within California's Public School Districts" (Washington: Center for American Progress, 2010), available at https://www.americanprogress.org/issues/education/report/2010/05/26/7746/comparable-schmomparable.

27 The Education Trust, "Their Fair Share: How Teacher Salary Gaps Shortchange Poor Children in Texas" (2007), available at http://edtrust.org/resource/their-fair-share-how-teacher-salary-gaps-shortchange-poor-children-in-texas/; Lindsey Luebchow, "Equitable Resources in Low Income Schools: Teacher Equity and the Federal Title I Comparability Requirement" (New America Foundation, 2009), available at http://www.newamerica.net/files/Equitable_Resources_in_Low_Income_Schools.pdf.

28 Center for American Progress, "Tipping the Scales: How a loophole in current education law allows inequities in education spending," August 2011, available at http://images2.americanprogress.org/CAP/2011/08/comparability.mp4.

29 This recommendation relies on definitions given in the Fiscal Fairness Act proposed in the 112th Congress. Specifically, districts should compare schools in the top three quartiles of poverty, or higher-poverty schools, with schools in the bottom quartile, or lower-poverty schools. See *Fiscal Fairness Act,* H.R. 1294.

30 U.S. Department of Education, *Title I Fiscal Issues: Maintenance of Effort; Comparability; Supplement, Not Supplant; Carryover; Consolidating Funds in Schoolwide Programs; Grantback Requirements* (2008), available at https://www2.ed.gov/programs/titleiparta/fiscalguid.pdf.

31 Karen Hawley Miles, Kaitlin Pennington, and David Bloom, "Do More, Add More, Earn More: Teacher Salary Redesign Lessons from 10 First-Mover Districts" (Washington: Center for American Progress, 2015), available at https://www.americanprogress.org/issues/education/report/2015/02/17/106584/do-more-add-more-earn-more.

32 Comparison schools are defined the same way as in the recommendations above. Specifically, Title I schools should be compared to non-Title I schools when possible. If not, higher-poverty Title I schools should be compared to lower-poverty Title I schools. Spatig-Amerikaner also recommended focusing first on schools with lowest per-pupil expenditures. Spatig-Amerikaner, "Unequal Education.