

CHAPTER 4

ADDRESSING THE ROOT CAUSES OF THE ACHIEVEMENT GAP

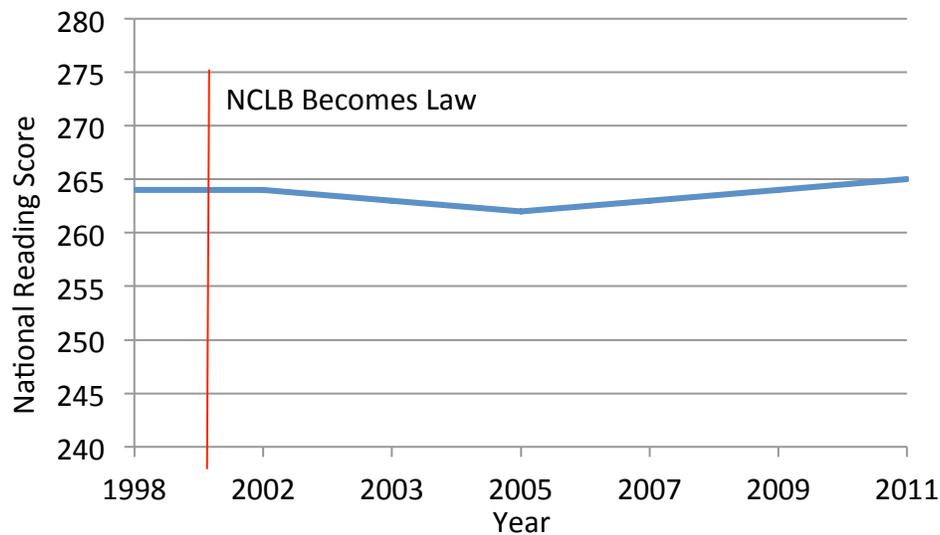
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Introduction

Since No Child Left Behind (NCLB) became law over a decade ago, trillions of dollars have been spent on administering and developing standardized tests, yet reading scores in the U.S. have not improved. Data from the National Assessment of Educational Progress (NAEP) illustrates that the average reading performance has increased only slightly over the last 10 years (see Figure 1).

Figure 1. Effect of NCLB on America's reading scores, 8th grade NAEP.



Note: Data taken from National Assessment for Educational Progress (NAEP) 2012.

Why No Child Left Behind Is Being Left Behind

NCLB was authorized with a promise “To close the achievement gap with accountability, flexibility, and choice, so that no child was left behind” (No Child Left Behind Act, 2002, title page). The 1,425-page law was shaped after what then-President George W. Bush often referred to as the “Houston Miracle;” as Governor of Texas, he enacted a state policy that he touted as having led to significant decreases in dropout rates and increases in students’ standardized test scores. The miracle was but a mirage, however.

PBS reporter Bill Moyers later uncovered the fact that Houston’s miracle was a result of widespread cheating and corruption by Houston school officials, who buckled under pressure and inflated student test scores in order to keep their jobs (Moyers, 2003). Thus it should not be surprising that NCLB’s strict accountability mandates have also triggered similar outcomes. In recent years, hundreds of teachers and school administrators around the country have been involved in cheating scandals (Goldstein, 2011; Turner, 2011). Ironically, these unethical actions still did not prevent public schools from “failing” under the definitions set by NCLB. In 2011, President Barack Obama announced that three out of every four schools in America would be labeled “failing” by the next year and that he would provide state departments of education the ability to opt out of the NCLB mandate. “Seeking a waiver,” as this is known, however, requires state departments to agree on several additional federal mandates that will, surprisingly, require more standardized testing and increase the use of test scores to measure school accountability. This policy, called “Race To the Top”, actually surpasses the Bush-era policies by mandating that low standardized test scores in every subject and at every level result in the firing of teachers and administrators and the replacement of public schools with charter schools.

It is becoming more and more evident that NCLB was doomed from the start—as is Race to the Top. NCLB set 2014 as the year in which all schools will have closed the achievement gap. As early as 2005, however, evidence suggested that the policy would label most public schools as “failing” since they would be unable to meet the mandated annual progress over time (California Department of Education, 2005; Wiley, Mathis, & Garcia, 2005). Obama’s Race to the Top set 2020 as the year in which all high school seniors will be “college ready,” although the President has yet to announce details on how the country could provide the required number of colleges to enroll all these “college-ready” students or on how, without adequate funding, schools are expected to prepare students for college

The ineffectiveness of both NCLB and Race to the Top results from the mistaken belief that increased standardization, teacher/school accountability, and “quality” teaching will result in equitable and effective schools for all. Research consistently shows that increased standardization makes teachers less effective in meeting students’ needs (Babione, 2010; Herbert, 2010; Skerrett & Hargreaves, 2008). Accountability is necessary and important in any profession, but, as stated earlier, standardized test scores are not a reliable measure of teacher effectiveness. It has already been noted that such testing led to cheating because of the intense pressure caused by increased school accountability and standardization which, it also appears, has an inverse effect on teaching quality. Ultimately, the main cause of the continued failure of NCLB and Race to the Top is the fact that neither policy addresses the largest, most fundamental predictor of student achievement: poverty. And poverty reinforces school segregation through racial and economic isolation.

A Turning Point

Public schooling in the United States is at a turning point in its history. After more than a decade of ineffective federal education policy, this country is on the brink of another similarly ineffective top-down federal initiative: Race to the Top. Now, more than ever, those who still believe in public education must redirect the discourse surrounding school reform in order to focus on addressing poverty as much as on ‘reforming’ schools. In this chapter we hope to provide the reader with a broad understanding of how poverty influences academic performance at the international, national, and local levels.

Poverty and Segregation in Schools

Since the seminal Coleman Report (Coleman et al., 1966), the academy has generally accepted the finding that student achievement is largely a function of the poverty levels of students within schools. Nearly 50 years have passed since Coleman came to this conclusion, yet, unfortunately, America’s schools today are as economically—and racially—segregated as they were 50 years ago (Orfield, 2009), with half of all Americans today living in or near poverty (Yen, 2011). Public discourse surrounding school reform, however, often continues to ignore the fact that poverty and segregation matter. Instead, the public is inundated with school reform strategies, such as charter schools, magnet schools, small schools, schools-within-schools, neighborhood schools, Teach for America, and merit pay. Most of these reform strategies have failed to produce substantive results over time because they operate under the false assumption that schools alone can close the achievement gap.

Any school reform aimed at closing the achievement gap must also address the socio-economic gap (Berliner, 2009; Sandy & Duncan, 2010; Rothstein, 2002, 2008). Racial

segregation, inadequate housing, income insecurity, and health care gaps are some of the many factors associated with living in poverty that schools reformers can no longer ignore. In urban areas, in particular, racial segregation is explicitly linked to living in poverty. As illustrated by research on the Gautreaux Program in Chicago (Mendenhall, DeLuca, & Duncan, 2006; Rosenbaum, 1995), poverty influences the geographic opportunities for both children and adults, such as access to quality schools and employment. Hundreds of low-income Black families living in mostly poor Black neighborhoods in Chicago were randomly selected to either stay in low-income mostly Black areas of the city or relocate to middle-class mostly White suburban areas. Longitudinal comparisons revealed that Black families moved to the suburbs experienced substantially better outcomes for both adults and children. Compared to urban groups in the program, children moved to the suburbs experienced higher rates of graduation, college enrollment, and employment with good pay and benefits (Rosenbaum). Parents placed in the mostly White, middle-class suburbs experienced higher rates of employment as well (Mendenhall, DeLuca, & Duncan; Rosenbaum). There is evidence to suggest that racial segregation is perhaps more important than class segregation; a similar study in Baltimore found that children in families selected to move to more affluent areas that were not racially integrated (80% or more people of color), did not experience higher student achievement scores (Sanbonmatsu, Kling, Duncan, & Brooks-Gunn, 2006).

Racial economics and racial isolation can have particularly negative impacts on student achievement in school (Grant, 2009; Sandy & Duncan, 2010; Southworth, 2010). Children living in poverty who attend schools with high concentrations of low-income children perform substantially worse in school than children living in poverty who attend schools without high concentrations of low-income children. In fact, 75% of the achievement gap between urban and

suburban schools can be explained by high concentrations of low-income, students of color (Sandy & Duncan). Living in poverty can negatively affect a student's academic performance, but isolating the poor in the same schools increases the intensity of these negative effects.

Some evidence suggests that racial segregation can have a more damaging effect on student achievement than class (economic) segregation. Using data collected by the Early Childhood Longitudinal Study (ECLS), Condron (2009) analyzed a nationally representative sample of first graders and found racial segregation to have the largest influence on the achievement gap—even larger than class segregation. Black students were far more likely to attend majority-minority schools, where they tend to perform more poorly than those Black students attending racially integrated schools of similar economic class. These findings help quantify the possible benefits in cultural capital (Bourdieu & Passeron, 1977) more likely to occur in racially/ethnically integrated schools.

In a comparative case study of Wake County's (Raleigh, NC) school system, Harvard Professor Gerald Grant (2009) documented the benefits of establishing metropolitan-wide districting for the purpose of creating more racially and economically integrated schools. Grant found Raleigh's system, similar to those of many Southern school systems, to be more racially and economically integrated than the city-only districts common in the North, which tend to reinforce racial and economic segregation. Although, in 2009, a conservative school board threatened to ban Raleigh's impressive bussing model—which requires that no school enrolls more than 40% of students in poverty—grass-roots organizing efforts continue to seek ways to integrate Raleigh's schools, albeit by achievement, not income.

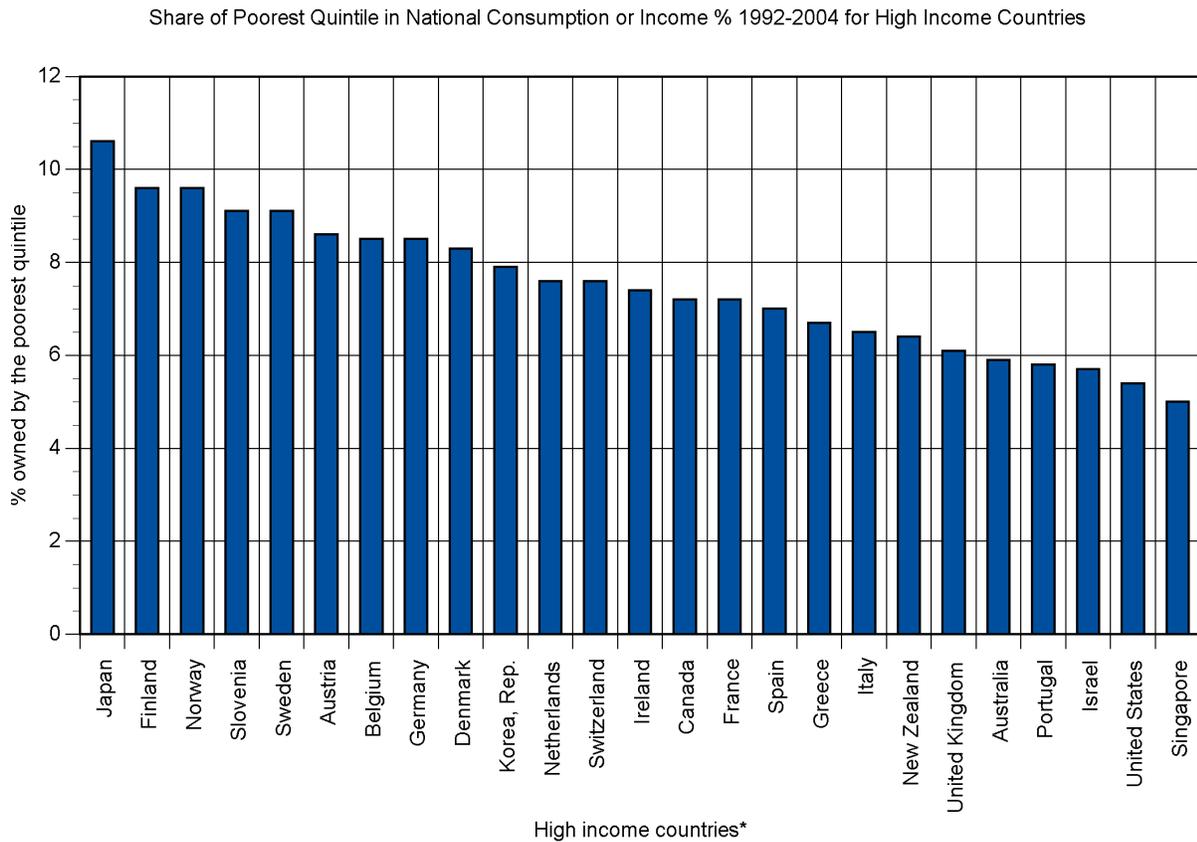
Unfortunately, social integration programs, like Raleigh's metro-districting and Chicago's Gautreaux Program, are relatively few in number. According to Kenty-Drane (2009)

over half of all Black and Hispanic first graders in the U.S. attend economically segregated (50% or greater free/reduced lunch) and racially segregated (75% or more students of color) schools. Meanwhile, 73% of all White students attend schools that are 80–100% White (Orfield, 2009). In 1954, the U.S. Supreme Court ruled in *Brown vs. Board of Education* that “separate educational facilities are inherently unequal.” How much of the achievement gap exists today because of America’s failure to adequately address racial and economic segregation? How much does poverty influence achievement?

USA: The Unequal State of America?

International comparisons prepared by the 2003 Program for International Student Assessment (PISA) indicate that unequal school systems are a function of unequal social and economic systems and that more equitable countries are likely to produce more equitable school outcomes. In 2003, all 17 countries that outperformed the United States on the PISA had less income-based inequality (McKinsey & Company, 2009). Using World Bank data, Werblow (2011) illustrated that, among the wealthiest countries of the world, the U.S. is one of the most inequitable. When comparing the share of the poorest quintile within the 25 wealthiest countries, the United States was second to last (see Figure 2). Without addressing economic inequality, it is likely that U.S. schools will continue to trail more equitable countries in the world.

Figure 2. An international comparison of income inequity using World Bank data, 2005.

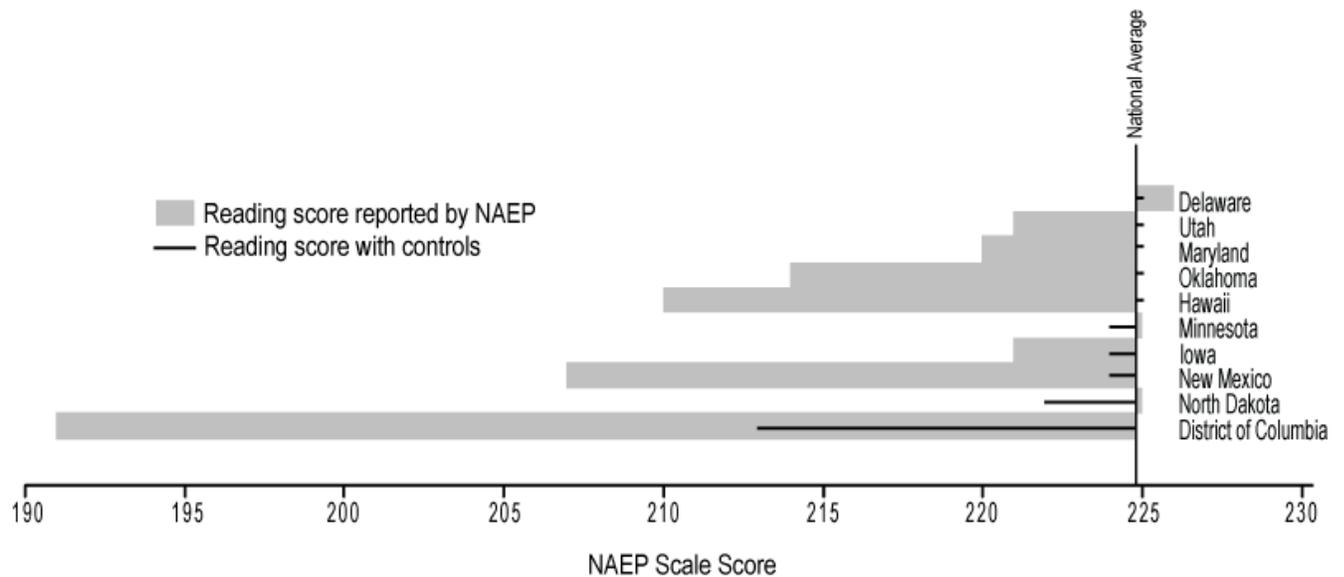


*Data taken from the World Bank Group 2006 World Development Indicators. Kuwait, Puerto Rico, and Saudi Arabia were not included due to missing data.

When using standardized test performance in English or math as the outcome of study, as currently required by NCLB, research consistently finds that nearly 85% of the achievement gap can be explained by social and economic inequality, not by differences in school quality (Raudenbush & Bryk, 2002; Marzano, 2000). And the National Assessment of Educational Progress (NAEP) reveals that 40–46% of the variance in student achievement scores can be explained by students' poverty level. Nearly half of Americans are either poor or low-income (Yen, 2011), yet school reformers who gain attention in the mainstream media largely continue to ignore this fact.

When using nationally representative data to draw state-by-state comparisons, it is easy to see that the achievement gap would be minimal if the U.S. was more economically equitable. Using 2006 data from the NAEP, Werblow and Duesbery (2009) conducted multiple regressions to illustrate the effect that social and economic factors have on student achievement. Results suggest (see Figure 3) that most of the gaps in student achievement disappear (*thin black line*) after accounting for differences outside of a school's control (poverty, race, urbanicity – *thick grey line*). Essentially, if there were no wealth gap, the achievement gap wouldn't be nearly as severe.

Figure 3. The achievement Gap on the NAEP: With and without controlling for social and economic inequality.



Note: Data taken from the 2006 National Assessment for Educational Progress (NAEP).

Why Poverty Matters

Gandhi called poverty the worst form of violence. Children in poverty are often bombarded by negative factors that more affluent children rarely experience. Berliner (2009) synthesizes several of the primary out-of-school factors associated with being poor in the United States. Some of these factors are described below:

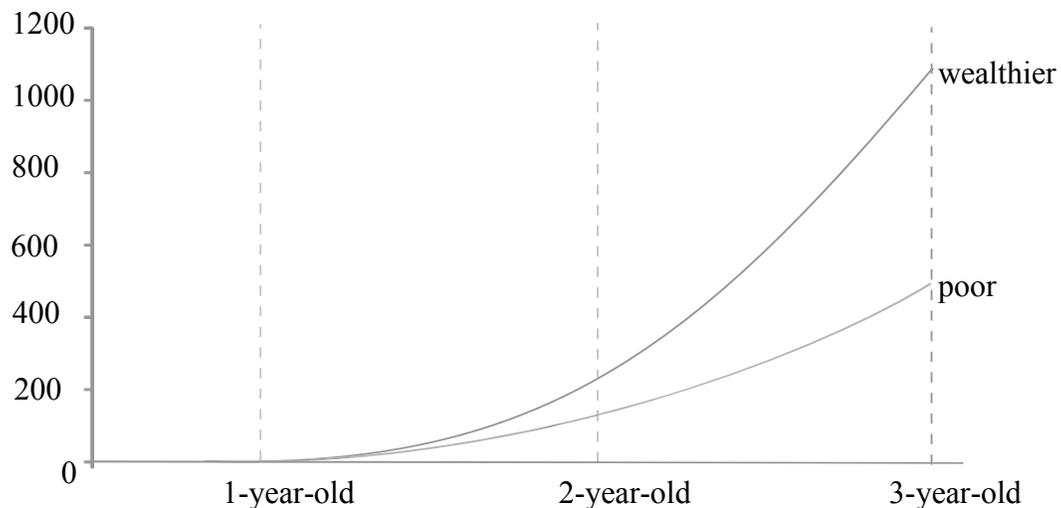
- *Inadequate or insufficient health care.* Low-income mothers often lack access to quality health care, do not have proper nutrition, and are significantly more likely to have complications with their pregnancies. Low birth-weight babies are more than twice as likely to have ADHD, and they are more likely to have lower IQ scores. Studies in Connecticut and Massachusetts have demonstrated that even exposure to low levels of air pollution can increase the risk of low birth weight.
- *Food insecurity.* Children, regardless of income, who do not consume an adequate supply of protein consistently display lower levels of reading comprehension. Many of these children depend on the Federal School Lunch Program (FSLP) for two balanced meals a day; however, 80% of the FSLP lunches do not meet the USDA's minimal nutritional guidelines (Ward, 2006).
- *Environmental pollutants.* Connecticut children living near coal-powered power plants in Bridgeport and near New London and trash incinerators in Hartford and Bridgeport are most at risk of unnecessary exposure to mercury, which causes a series of health symptoms similar to ADHD in children. Rates of asthma hospitalization are two and three times higher in Hartford, New Haven, and Bridgeport than elsewhere in the state (Connecticut Coalition for Environmental Justice, 2008). Lead poisoning is prevalent

throughout the Northeast; in 2003, 20% of the children who entered kindergarten in Providence, RI, suffered from lead poisoning (Grist, 2004).

Early Signs of the Achievement Gap

Once an infant becomes old enough to understand language and pronounce words, it is possible to quantify the effects of these out-of-school factors associated with living in poverty. In a quasi-naturalistic study by Hart and Risely (1995), monthly home observations of children, ages nine months and older, determined a widening gap in correct pronunciation of words as early as 24 months of age. The graph below (Figure 4), modified from Hart and Risely's study, shows the different learning rates in letter identification of poor children whose parents were on welfare ($n=6$) and wealthier children whose parents were professionals ($n=13$). Although the sample size in this study was obviously small, similar conclusions have been drawn from a large-scale report by the Anne E. Casey Foundation (2011), which demonstrated that by the age of four, poor children are, on average, 18 months behind the norm. The gaps are severe well before children enter school, and schools have not been effective in enabling those who start behind to catch up.

Figure 4. Achievement gap (correct word pronunciation) before children enter kindergarten.



Note: Adapted from Hart and Risely (1995).

As students move through the school system from grades K–12, the achievement gap widens each summer (Celano & Newman, 2008); however, during the academic year, schools are not effectively able to close the gap. Thus, it would appear that if we are to close this gap, students from low-income families need the social support and experiences that middle-class students often have (Ladd & Fiske, 2011). The influence of poverty needs to be addressed head on, and schools need to function in ways that are culturally relevant, equitable, and engaging for all students.

Connecticut: A Case of Economic and Educational Inequality

Connecticut consistently has the nation's highest achievement gap between students living in poverty and their more affluent peers. This margin of difference is nearly 60% larger than the national average (Werblow, 2009). Why is the achievement gap largest in Connecticut? The state is one of the wealthiest in the union, but it is also home to some of the poorest, most segregated urban areas in America.

Connecticut is the epicenter for racial and economic injustice in America. It is the Birmingham, Alabama, of our time. Over 87,000 children in Connecticut live in poverty; 70,000 have no health insurance (Children's Defense Fund, 2011). Many of their parents are either unemployed or underemployed. Nearly half a million people in Connecticut cannot find employment (Connecticut Center for Economic Analysis, 2010). Despite these troubling statistics, many local school districts in Connecticut are expected to be flat-funded or to receive less funding than in previous years. Meanwhile, 11 residents in the state have a total net worth of 35.8 billion dollars (Forbes, 2011), a portion of which would provide thousands of children living in poverty with the social and academic supports they need.

Connecticut, as well as many other northern states, has segregated schools because school district lines are drawn along town lines, and Connecticut has not developed a state-wide policy to adequately address racial or economic integration. Even the landmark civil rights decision of *Sheff vs. O'Neill*, in which the Connecticut State Supreme Court ruled that segregation prevented students of color in Hartford from receiving an equal education, has affected only a small number of children. Since that court ruling in 1997, Connecticut has spent more than \$1 billion to facilitate school desegregation, yet fifteen years later, less than 30% of Hartford students benefit from attending racially integrated *Sheff* schools. In the Sheff lottery of 2012, there were approximately 4,000 open seats for the 15,000 students who applied.

Methods and Sample

Using information from the Connecticut State Department of Education for the 2009–2010 school year, we constructed a dataset containing school-level data of every public high school in the state ($N = 200$). Tenth-grade Connecticut Aptitude Performance Test (CAPT) scores were used to measure the average reading achievement for high schools. We captured student demographic data from Connecticut's 2010 School Report Cards. This data included each school's percentage of students of color and percentage of students eligible to receive free/reduced lunch. Using this data, we conducted correlations and linear regressions to explore the effect that poverty has on student achievement in Connecticut. In some analyses, a small number of cases were deleted due to missing data.

Results

From a simple ranking of the average student achievement scores in each high school ($N = 200$), we found that few students of color or children living in poverty attended one of the

top five performing schools in Connecticut in 2010. The top and bottom performing high schools in Connecticut are extremely segregated by race and class (see Table1).

Table 1. Race/Ethnicity and Poverty Makeup of Students Attending Top and Bottom Performing High Schools in Connecticut.

Top performing schools (% students at/above goal)	% minority	% poor	Bottom performing schools (% students at/above goal)	% minority	% poor
Weston (100)	6	1	Stamford Academy (6)	92	90
New Canaan (99)	6	1.0	Stevens, East Hartford (10)	77	67
Staples, Westport (99)	6	3	Bassick, Bridgeport (16)	96	95
Bolton (99)	5	4	Opportunity, Hartford (24)	NA	NA
Wilton (98)	7	1	Norwalk (25)	54	41

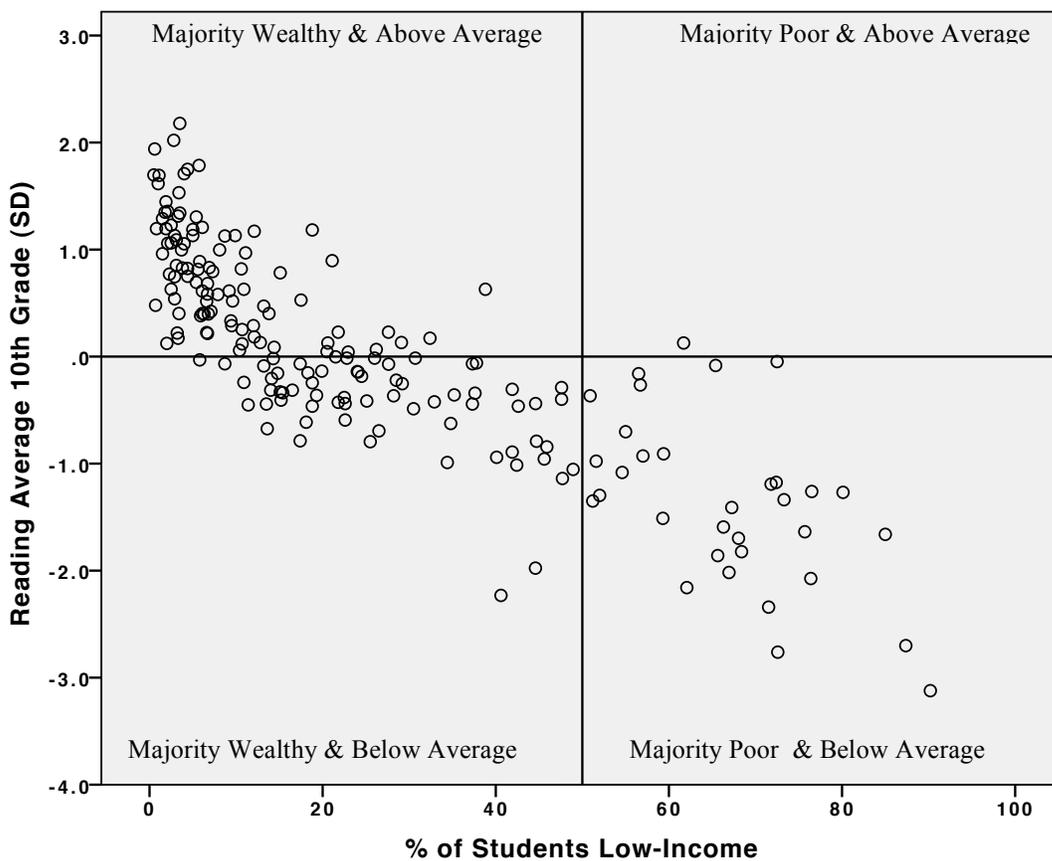
Note: Achievement taken from Connecticut Academic Performance Test (CAPT), 2010.

Poverty data taken from Connecticut's 2010 School Report Cards.

The trend is similar for nearly all high schools in Connecticut. A scatterplot of high schools ($n = 191$) in the state illustrates that standardized test scores, referred to as the Connecticut Aptitude Performance Test (CAPT), represent little more than a school's percentage of students living in poverty. CAPT scores are strongly correlated with a schools' percentage of students living in poverty, $r(189) = -.83, p < .001$. Multiple linear regressions revealed that 69% of the difference (variance) in a school's average student achievement can be explained by the percentage of students living in poverty, $R^2 = .69, F(1, 132.64) = 437.13, p < .001$. In fact, there is only one high school in the entire state that enrolls mostly students living in poverty *and*

performs above the state average (see upper-right quadrant in the figure below). Each standard deviation (SD) unit represents a 32% difference from the mean (state average = .00). (See Figure 6.)

Figure 6. The relationship between average reading achievement and the percent of students in poverty among Connecticut's high schools, 2010.

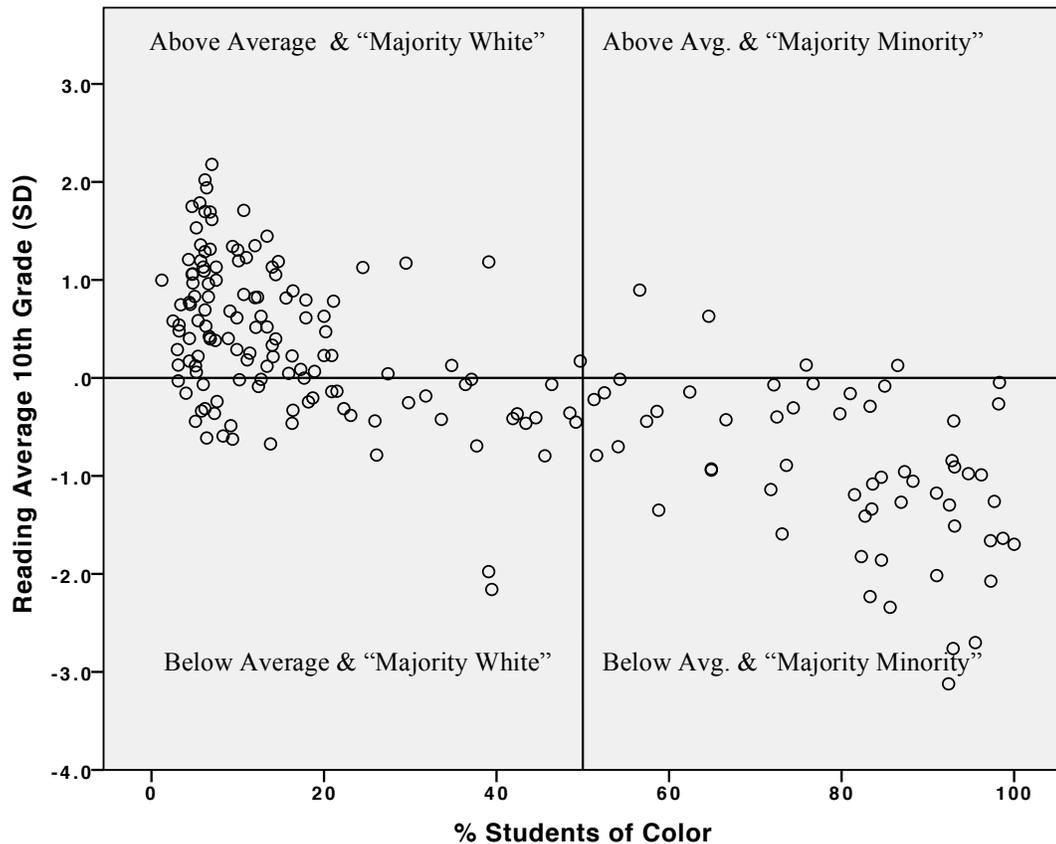


Note: Achievement taken from Connecticut Academic Performance Test (CAPT), 2010. Poverty data taken from Connecticut's 2010 School Report Cards.

On the surface, when comparing average achievement scores to the percentage of students of color in a school, a relationship appears to exist. High school achievement scores are strongly correlated with a school's percentage of students of color, $r(189) = .72, p < .001$. This, however,

is misleading. In the linear regression, race/ethnicity was no longer statistically significant after controlling for the percentage of students living in poverty. The problem is poverty, not race. But scatterplots illustrate that most students of color attending racially segregated schools (less than 50% White) in Connecticut have little chance of performing above the state average. There are only four high schools in the entire state that enroll mostly students of color and perform above the state average (see upper-right quadrant in Figure 7).

Figure 7. Relationship between average reading achievement and the percent of students of color within Connecticut's high schools, 2010.

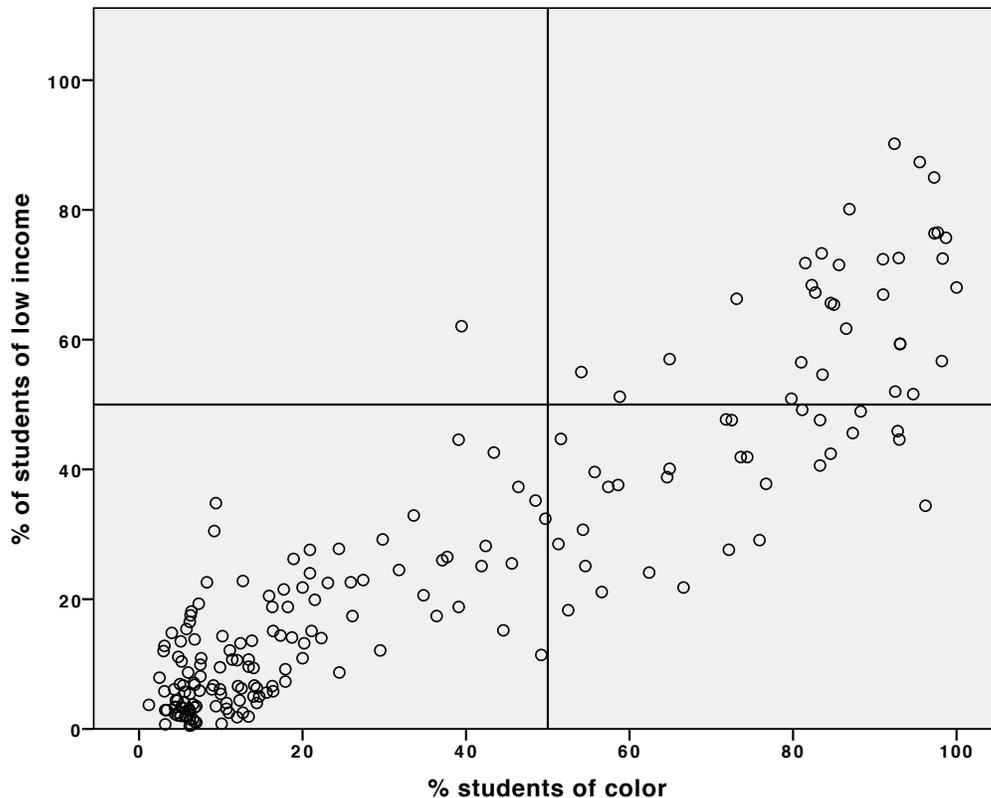


Note: Achievement taken from Connecticut Academic Performance Test (CAPT), 2010.

Race/Ethnicity data taken from Connecticut's 2010 School Report Cards.

Schools enrolling mostly students of color perform poorly not because of the racial makeup of the student body but because of the poverty level experienced by those students. Remarkably, nearly 150 years after the emancipation proclamation, there is an almost perfect correlation between poverty and race in Connecticut's high schools, $r(195) = .91, p < .01$. There are no schools in Connecticut that enroll mostly Whites living in poverty (see lower-right quadrant of Figure 8 below).

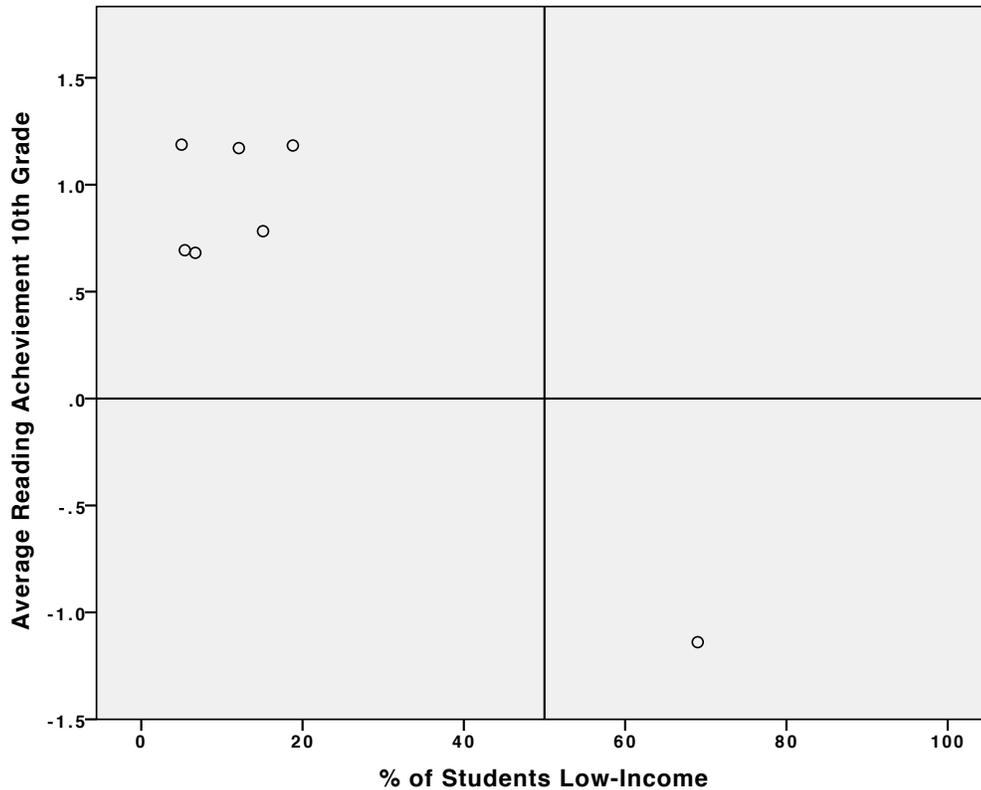
Figure 8. The relationship between the percent of students of color and students of low income within Connecticut's high schools, 2010.



Note: Data taken from Connecticut's 2010 School Report Cards.

Exploring the issue of school segregation at a local level, we identified six suburban high schools, all located within 13 miles of an urban high school. Nearly 70% of students attending the urban high school lived in poverty; whereas, the six suburban schools served mostly affluent students. Although these suburban schools were only a few miles from the urban school, data reveals that these schools could be worlds apart. The urban high school's average reading performance was nearly 64% lower than that of its neighbors and approximately 32% lower than the state average. District lines show a direct correlation between income level and performance achievement and directly reinforce racial and economic segregation in Connecticut's schools (see Figure 9).

Figure 9. One urban high school compared to its neighbors, average reading performance 2010.



Note: Achievement taken from Connecticut Academic Performance Test (CAPT), 2010.

Race/Ethnicity data taken from Connecticut's 2010 School Report Cards.

As much as the Connecticut achievement gap is due to socioeconomic factors, evidence suggests that school structure and operation also contribute to school inequality. A recent large-scale study using a nationally representative sample of high schools found that those serving predominantly more-affluent students tend to be structured and operated differently from schools serving predominantly less-affluent students (Rumberger & Paladry, 2005). Similar results have

also been documented (Anyon, 2005; Kozol, 2005; and Levin, 1998). Our research suggests that high concentrations of children living in poverty in schools produce a lower or different quality of education for students. Consequently, when children living in poverty attend schools with high concentrations of children living in poverty, the effects of poverty become compounded.

Reflections

As state and federal policy continue to push for more legislation that increasingly uses standardized test scores to further reward or punish schools, evidence mounts steadily to demonstrate that the achievement gap is most fundamentally caused by poverty, not school quality. At the same time, the root cause of the gap is inextricably linked to the structures and policies that create and reinforce social and economic inequality, in Connecticut and throughout the United States. Rarely is this reality reflected in the political discourse or the views of the mainstream media. As a consequence, policy makers are attempting to remediate a failing system without taking into account the most fundamental cause of that failure. If real change is to take place in American schools, the framework for evolutionary reform will have to begin with a commitment to reducing the extremity of our nation's social/economic disparity. Nearly 50 years ago, Dr. Martin Luther King, Jr. (1967), spoke to the need to address this very issue:

I am now convinced that the simplest approach will prove to be the most effective—the solution to poverty is to abolish it directly.... We are likely to find that the problems of housing and education, instead of preceding the elimination of poverty, will themselves be affected if poverty is first abolished.

In recent years, America's schools have become as segregated as they were before *Brown v. Board of Education* in 1954 (Orfield, 2009), which called for an end to racially segregated schools. Because of more recent interpretations of *Brown*, school boards no longer have the right to integrate schools based on race, but they do have the right to integrate schools based on socioeconomic status. Redrawing district lines and attendance zones would obviously be politically and emotionally challenging, but this may become the civil rights issue of our time. In racially and economically integrated schools, lower performing students perform higher and higher performing students perform comparable to their peers in segregated schools (Ciolfi & Ryan, 2008; Grant, 2009).

Policy Guidelines for Dealing with the Gap

If school reformers—be they politicians, educators, or the interested public—are seriously committed to closing the achievement gap, their reform efforts must be grounded in a new vision. Below are some guidelines for readers to consider:

Become a Robin Hood: A massive redistribution of wealth can provide the social services necessary to create a more equitable American school system. Through a more progressive tax system, most European countries provide their citizens with quality universal, single-payer health care, free/low-cost higher education, and universal early childhood education. It's time to put on your green tights and feathered cap. The Connecticut Coalition for Educational Justice (CCJEF), with the support of Yale Law School, brings promise to this issue, locally.

Advocate for racial and socioeconomic integration of cities and towns: Programs to desegregate neighborhoods, such as the Gautreaux Program in Chicago, have been beneficial for low-income Black families moving to the suburbs (Mendenhall, DeLuca, & Duncan, 2006;

Rosenbaum, 1995), but urban renewal projects are also needed. Urban renewal must serve as a true means of racial and economic integration, not, as is so often the case, as a mask for gentrification (see Glass, 1964).

Work to consolidate and desegregate school districts: The consolidation of school districts is often touted as a cost-saving mechanism (Duncomb & Yinger, 2010) and, if done with a vision of school desegregation, could be a model for more racially and economically integrated and equitable schools, such as those in Raleigh (Grant, 2009). Diversity (in all of its forms) should be celebrated in schools, not avoided. Today's continued segregation of America's schools is as unacceptable and unlawful as it was before the civil rights era.

Abolish high-stakes standardized testing: Finland, consistently the top country in the world in terms of learning achievement, has one high-stakes standardized test at the end of secondary school (Sahlberg, 2011). Obama's Race to the Top is calling for mandated high-stakes standardized testing of all subject areas, in all grades. In the U.S., standardized test scores reveal little more than is already known: the poverty level of the school. It is time to focus on engaging and culturally relevant teaching and learning rather than standardized testing (see Turner, Foshay, and Pancsofar, in this volume). Any assessment worth standardizing should measure creativity and critical thinking through culturally relevant, authentic tasks. Further, these assessments should value the linguistic diversity of non-native English speakers; otherwise these students will continue to be treated as a deficit.

Conclusion

In educational circles it is common to hear the use of the term "systems thinking;" however, rarely is the phrase used to describe a reorganization and reconceptualization of the

entire educational and economic system. Closing the achievement gap must be rooted—as was NCLB in its original form as the Elementary and Secondary Education Act of 1965—in nothing less than the vision of bringing an end to poverty. Otherwise, continuing to assume that an equitable school system can exist in a vastly unequal society is to assume that clemency will come, as one’s head rests in the gallows.

References

- Anne E. Casey Foundation. (2011). *2011 kids count data book: State profiles of child well-being*. Baltimore, MD: Author. Retrieved from <http://www.aecf.org>
- Anyon, J. (2005). *Radical possibilities: Public policy, urban education, and a new social movement*. Oxford, England: Routledge.
- Babione, C. (2010). Rural and small community educator responses to state academic standards. *Rural Education*, 31(3), 7–15.
- Berliner, D. C. (2009, March). *Poverty and potential: Out-of-school factors and school success*. Boulder, CO, and Tempe, AZ: Education and the Public Interest Center, University of Colorado, & Education Policy Research Unit, Arizona State University. Retrieved from <http://epicpolicy.org/publication/poverty-and-potential>
- Bourdieu, P., & Passeron, J.C. (1990). *Reproduction in education, society and culture*. London: Sage.
- Celano, D., & Newman, S.B. (2008, December). When schools close, the knowledge gap grows. *Phi Delta Kappan*, 256–262.
- Children’s Defense Fund (n.d.). *Children in Connecticut*. Washington, DC: Author. Retrieved from <http://cdf.childrensdefense.org/site/DocServer/ct-3.pdf?docID=368>
- Ciolfi, A., & Ryan, J.E. (2008). Socioeconomic integration: It’s legal, and it makes sense. *Education Week*, June 18th. Retrieved from: <http://www.edweek.org>
- Coleman, J.S., et al. (1966). *Equality of educational opportunity study (EEOS)* (ICPSR No. 6389). Washington, DC: U.S. Department of Education. Retrieved from <http://dx.doi.org/10.3886/ICPSR06389.v3>

- Condrón, D. (2009). Social class, school and non-school environment, and Black/White inequalities in children's learning. *American Sociological Review*, 74, 683–708.
- Connecticut Center for Economic Analysis. (2010). *A very deep hole, indeed: The Connecticut economic outlook: November, 2010*. Storrs, CT: Author. Retrieved from http://ceea.uconn.edu/forecasts/CTOutlook_2010Nov.pdf
- Connecticut Coalition for Environmental Justice. (2008). *Asthma in CT's cities*. Hartford, CT: Author. Retrieved from www.environmentaljustice.org/issues/asthma.html
- Duncomb, W.D., & Yinger, J.M. (2010). School district consolidation: The benefits and costs. *The School Administrator*, 5(67), 10–17.
- Glass, R. (1964). Introduction: Aspects of change. In Centre for Urban Studies, London University College (Ed.), *London: Aspects of change*. Location of publisher: MacKibbon & Kee.
- Goldstein, D. (2011, July). How high-stakes testing led to the Atlanta cheating scandal and the ones in Washington, D.C., Los Angeles, and Houston. *Slate*. Retrieved from www.slate.com
- Grant, G. (2009). *Hope and despair in the American city: Why there are no bad schools in Raleigh*. Cambridge, MA: Harvard University Press.
- Grist: A beacon in the smog. (2004, January 22). Enough to make your lead spin: Rhode Island lawsuit pinpoints lead poisoning as an environmental, not medical, problem [Web log post]. Retrieved January 3, 2009, from www.grist.org/comments/gist/2004/01/22/spin2/
- Hart, B., & Risely, T.R. (1995). *Meaningful differences in the everyday experience of young American children*. Baltimore, MD: Paul H. Brookes.
- Herbert, T. (2010). Crafting moments of inspiration in the classroom. *Kappa Delta Pi Record*, 46, 148–151.

- Kenty-Drane, J. L. (2009). Early isolation: Racial and economic segregation in U.S. public elementary schools. *Race, Gender, and Class, 16*, 45–62.
- King, Jr., M. L. (1967). *Where do we go from here: Chaos or community?* New York, NY: Harper & Row.
- Kozol, J. (2005). *The shame of the nation: The restoration of apartheid schooling in America.* New York, NY: Three Rivers Press.
- Ladd, H. F., & Fiske, E. B. (2011, December 11). Class matters. Why won't we admit it? [Editorial]. *The New York Times*. Retrieved from: www.nytimes.com/2011/12/12/opinion/the-unaddressed-link-between-poverty-and-education.html?pagewanted=all
- Levin, M. (1998). *Teach me! Kids will learn when oppression is the lesson.* New York, NY: Monthly Review Press.
- Marzano, R. J. (2000). *A new era of school reform: Going where the research takes us.* Aurora, CO: Mid-continent Research for Education and Learning. Retrieved from www.mcrel.org
- McKinsey & Company. (2009). *The economic impact of the achievement gap in America's schools* [Report]. Retrieved from <http://mckinseysociety.com/the-economic-impact-of-the-achievement-gap-in-americas-schools/>
- Mendenhall, R., DeLuca, S., & Duncan, G. (2006). Neighborhood resources, racial segregation, and economic mobility: Results from the Gautreaux program. *Social Science Research, 35*, 892–923.
- Moyers, B. (2003). Now Episode 238. In JumpStart Productions, LLC, in association with Thirteen/WNET New York, *Now with Bill Moyers*. Location: Public Broadcasting Service. Oct. 17th, 2003. Transcript available at: www.pbs.org/now/transcript/transcript238_full.html
- No Child Left Behind Act of 2002, Pub. L. No. 107-110, 115 Stat. 1425 (2002).

- Orfield, G. (2009). *Reviving the goal of an integrated society: A 21st century challenge*. Los Angeles, CA: The Civil Rights Project/Proyecto Derechos Civiles, UCLA. Retrieved from <http://civilrightsproject.ucla.edu/research/k-12-education/integration-and-diversity/reviving-the-goal-of-an-integrated-society-a-21st-century-challenge>
- Raudenbush, S.W. & Bryk, B. (2002). *Hierarchical linear models: Applications and data analysis methods* (2nd ed.). Thousand Oaks, CA: Sage.
- Rosenbaum, J.E. (1995). Changing the geography of opportunity by expanding residential choice: Lessons from the Gautreaux program. *Housing Policy Debate*, 6, 231–269.
- Rothstein, R. (2002, January). *Out of balance*. Paper presented at the 20th anniversary conference of Traditions of Scholarship in Education. Chicago: The Spencer Foundation.
- Rothstein, R. (2008). Whose problem is poverty? *Educational Leadership*, 65(7), 8–13.
- Rumberger, R. W., & Paladry, G. J. (2005). Does segregation still matter? The impact of student composition on academic achievement in high school. *Teachers College Record*, 107, 1999–2045.
- Sahlberg, P. (2011). *Finnish lessons: What can the world learn from educational change in Finland?* New York, NY: Teachers College Press.
- Sanbonmatsu, L., Kling, J. R., Duncan, G. J., & Brooks-Gunn, J. (2006). Neighborhoods and academic achievement: Results from the moving to opportunity experiment. *The Journal of Human Resources*, 41, 649–691.
- Sandy, J., & Duncan, K. (2010). Examining the achievement test score gap between urban and suburban students. *Education and Economics*, 18, 297–315.

- Southworth, S. (2010). Examining the effects of school composition on North Carolina student achievement over time. *Education Policy Analysis Archives*, 18(29). 1-45. Retrieved from <http://epaa.asu.edu/ojs/article/view/848>
- Turner, D. (2011, July 26). 'Run like the mob': US school cheating scandal details emerge. Investigators: Nearly half of Atlanta's schools allowed cheating to go unchecked. *The Associated Press*. Retrieved from www.msnbc.msn.com
- Turner, J. P., Foshay, J. D., & Pancsofar, E. (In this volume). Toward a more balanced assessment framework.
- U. S. Department of Education. (2005). *10 facts about K-12 education funding*. Washington, DC: Author. Retrieved from: www2.ed.gov/about/overview/fed/10facts/index.html
- Werblow, J. (2009, May). *A new paradigm shifting under NCLB*. Paper presented at the annual conference of the New England Educational Research Organization (NEERO), Portsmouth, NH.
- Werblow, J. (2011, October). *Getting to the root: Addressing the causes of the achievement gap*. Paper presented at the annual conference of the New England Philosophy of Education Society (NEPES), New Britain, CT.
- Werblow, J., & Duesbery, L. (2009, April). *NAEP:2005. The real state ranks in 4th grade*. Presented at the annual meeting of the American Educational Research Association (AERA), San Diego, CA.
- Yen, H. (2011, December 14). Half of all Americans are poor or low-income. *The Associated Press*. Retrieved from: www.pbs.org/newshour/bb/business/july-dec11/othernews_12-15.html