Effects of Inequality and Poverty vs. Teachers and Schooling on America's Youth

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What does it take to get politicians and the general public to abandon misleading ideas, such as, "Anyone who tries can pull themselves up by the bootstraps," or that "Teachers are the most important factor in determining the achievement of our youth"? Many ordinary citizens and politicians believe these statements to be true, even though life and research informs us that such statements are usually not true.

Certainly people do pull themselves up by their bootstraps and teachers really do turn around the lives of some of their students, but these are more often exceptions, and not usually the rule. Similarly, while there are many overweight, hard-drinking, cigarette-smoking senior citizens, no one seriously uses these exceptions to the rule to suggest that it is perfectly all right to eat, drink, and smoke as much as one wants. Public policies about eating, drinking, and smoking are made on the basis of the general case, not the exceptions to those cases. This is not so in education.

For reasons that are hard to fathom, too many people believe that in education the exceptions are the rule. Presidents and politicians of both parties are quick to point out the wonderful but *occasional* story of a child's rise from poverty to success and riches. They also often proudly recite the heroic, remarkable, but *occasional* impact of a teacher or a school on a child. These stories of triumph by individuals who were born poor, or success by educators who changed the lives of their students, are widely believed narratives about our land and people, celebrated in the press, on television, and in the movies. But in fact, these are simply myths that help us feel good to be American. These stories of success reflect real events, and thus they are certainly worth studying and celebrating so we might learn more about how they occur (cf. Casanova, 2010). But the *general* case is that poor people stay poor and that teachers and schools serving impoverished youth do not often succeed in changing the life chances for their students.

America's dirty little secret is that a large majority of poor kids attending schools that serve the poor are not going to have successful lives. Reality is not nearly as comforting as myth. Reality does not make us feel good. But the facts are clear. Most children born into the lower social classes will not make it out of that class, even when exposed to heroic educators. A simple statistic illustrates this point: In an age where college degrees are important for determining success in life, only 9% of low-income children will obtain those degrees (Bailey & Dynarski, 2011). And that discouraging figure is based on data from before the recent recession that has hurt family income and resulted in large increases in college tuition. Thus, the current rate of college completion by low-income students is probably lower than suggested by those data. Powerful social

forces exist to constrain the lives led by the poor, and our nation pays an enormous price for not trying harder to ameliorate these conditions.

Because of our tendency to expect individuals to overcome their own handicaps, and teachers to save the poor from stressful lives, we design social policies that are sure to fail since they are not based on reality. Our patently false ideas about the origins of success have become drivers of national educational policies. This ensures that our nation spends time and money on improvement programs that do not work consistently enough for most children and their families, while simultaneously wasting the good will of the public (Timar & Maxwell-Jolly, 2012). In the current policy environment we often end up alienating the youth and families we most want to help, while simultaneously burdening teachers with demands for success that are beyond their capabilities.

Detailed in what follows is the role that inequality in wealth, and poverty, play in determining many of the social outcomes that we value for our youth. It is hoped that our nation's social and educational policies can be made to work better if the myths we live by are understood to be just that, simple myths, and we learn instead to understand reality better.

A WRONGHEADED EDUCATION POLICY

Bi-partisan congressional support in the USA for the No Child Left Behind Act (NCLB), passed in 2001, demanded that every child in every public and charter school in the country be tested in grades 3-8 and grade 10. There were severe consequences for schools that did not improve rapidly. The high-stakes accountability program at the center of the policy was designed to get lazy students, teachers, and administrators to work harder. It targeted, in particular, those who attended and worked in schools with high concentrations of poor children. In this way it was believed that the achievement gap between poor students and those who were middleclass or wealthy could be closed, as would the gaps in achievement that exist between black, Hispanic, American Indian, and white students. It has not worked. If there have been gains in achievement they have been slight, mostly in mathematics, but not as easily found in reading (see Amrein & Berliner, 2002; Braun, Chapman, & Vezzu, 2010; Chudowsky, Chudowsky, & Kober, 2009; Lee, 2008; Nichols, Glass, & Berliner, 2006, 2012; Smith, 2007). It may well be that the gains now seen are less than those occurring before the NCLB act was put into place. In fact, the prestigious and non-political National Research Council (2011) says clearly that the NCLB policy is a failure, and all the authors of chapters in a recently edited book offering alternative policies to NCLB reached the same conclusion (Timar & Maxwell-Jolly, 2012). Moreover, a plethora of negative side effects associated with high-stakes testing are now well documented (Nichols & Berliner, 2007; Ravitch, 2010).

By 2008-2009, after at least five years of high-stakes testing in all states, about one-third of all U.S. schools failed to meet their targeted goals under NCLB (Dietz, 2010). Estimates in 2011, by the U.S. Secretary of Education, are that more than 80% of all U.S. public schools will fail to reach their achievement targets in 2012 (Duncan, 2011), and almost every school in the nation will fail by 2014. And this widespread failure is with each state using their own testing instruments, setting their own passing rates, and demanding that their teachers prepare students assiduously. The federal government at the time this paper is being written is now quickly backing off the requirements of the failed NCLB act, and granting waivers from its unreachable goals to those states willing to comply with other "reform" efforts that also will not work. These other inadequate reforms required by the federal government include the forced adoption of the Common Core State Standards, using numerous assessments from pre-kindergarten to high school graduation that are linked to the Common Core, and evaluating teachers on the basis of their students' test performance.

In addition, and long overdue, as this paper is being written a backlash against high-stakes testing from teachers, administrators, and parents has begun (see "Growing national movement against 'high stakes' testing," 2012). Still, most state legislatures, departments of education, and the federal congress cling to the belief that if only we can get the assessment program right, we will fix what ails America's schools. They will not give up their belief in what is now acknowledged by the vast majority of educators and parents to be a failed policy.

Still further discouraging news for those who advocate testing as a way to reform schools comes from the PISA assessments (The Program for International Student Assessment). Nations with high-stakes testing have generally gone down in scores from 2000 to 2003, and then again by 2006. Finland, on the other hand, which has no high-stakes testing, and an accountability system that relies on teacher judgment and school level professionalism much more than tests, has shown growth over these three PISA administrations (Sahlberg, 2011).

Finland is often considered the highest-achieving nation in the world. Their enviable position in world rankings of student achievement at age 15 has occurred with a minimum of testing and homework, a minimum of school hours per year, and a minimum of imposition on local schools by the central government (Sahlberg, 2011). Although we are constantly benchmarking American school performance against the Finns, we might be better served by benchmarking our school policies and social

programs against theirs. For example, Finland's social policies result in a rate of children in poverty (those living in families whose income is less than 50% of median income in the nation) that is estimated at well under 5%. In the USA that rate is estimated at well over 20%!

The achievement gaps between blacks and whites, Hispanics and Anglos, the poor and the rich, are hard to erase because the gaps have only a little to do with what goes on in schools, and a lot to do with social and cultural factors that affect student performance (Berliner 2006; 2009). Policymakers in Washington and state capitals throughout the USA keep looking for a magic bullet that can be fired by school "reformers" to effect a cure for low achievement among the poor, English language learners, and among some minorities. It is, of course, mostly wasted effort if the major cause of school problems stems from social conditions beyond the control of the schools. The evidence is that such is the case.

Virtually every scholar of teaching and schooling knows that when the variance in student scores on achievement tests is examined along with the many potential factors that may have contributed to those test scores, school effects account for about 20% of the variation in achievement test scores, and teachers are only a part of that constellation of variables associated with "school." Other school variables such as peer group effects, quality of principal leadership, school finance, availability of counseling and special education services, number and variety of AP courses, turnover rates of teachers, and so forth, also play an important role in student achievement. Teachers only account for a portion of the "school" effect, and the school effect itself is only modest in its impact on achievement.

On the other hand, out-of-school variables account for about 60% of the variance that can be accounted for in student achievement. In aggregate, such factors as family income; the neighborhood's sense of collective efficacy, violence rate, and average income; medical and dental care available and used; level of food insecurity; number of moves a family makes over the course of a child's school years; whether one parent or two parents are raising the child; provision of high-quality early education in the neighborhood; language spoken at home; and so forth, all substantially affect school achievement.

What is it that keeps politicians and others now castigating teachers and public schools from acknowledging this simple social science fact, a fact that is not in dispute: Outside-of-school factors are three times more powerful in affecting student achievement than are the inside-the-school factors (Berliner, 2009)? And why wouldn't that be so? Do the math! On average, by age 18, children and youth have spent about 10 percent of their lives in what we call schools, while spending around 90 percent of

their lives in family and neighborhood. Thus, if families and neighborhoods are dysfunctional or toxic, their chance to influence youth is nine times greater than the schools?! So it seems foolish to continue trying to affect student achievement with the most popular contemporary educational policies, mostly oriented toward teachers and schools, while assiduously ignoring the power of the outside-of-school factors. Perhaps it is more than foolish. If one believes that doing the same thing over and over and getting no results is a reasonable definition of madness, then what we are doing is not merely foolish: it is insane.

HOW INEQUALITY OF INCOME, AND POVERTY AFFECT THE ACHIEVEMENTS OF OUR YOUTH

Few would expect there to be equality of achievement outcomes when inequality of income exists among families. The important question for each nation is the magnitude of the effect that social class has on test scores within countries. In the recent PISA test of reading achievement, socio-economic variables (measured quite differently than is customarily done in the USA) explained about 17% of the variation in scores for the USA (OECD, 2010). But socioeconomic status explained less than 10 percent of the variance in outcomes in counties such as Norway, Japan, Finland, and Canada. Although in some nations a family's social class had a greater effect on tested achievement, it is also quite clear that in some nations the effects of familial social class on student school achievement are about half of what they are in the USA. Another way to look at this is to note that if a Finnish student's family moved up one standard deviation in social class on the PISA index, that student's score would rise 31 points on the PISA test, which has a mean of 500 and a standard deviation of 100. But if that same happy family circumstance occurred in the USA, the student's score would rise 42 points, indicating that social status has about 30 percent more of an effect on the test scores among American youth than in Finland.

The PISA data were also looked at for the percent of children in a nation that came from disadvantaged backgrounds and still managed to score quite well on the test. That percent is over 80% in Hong Kong, over 50% in Korea, over 40% in Finland, but not even 30% in the USA. Somehow other nations have designed policies affecting lower social class children and their families that result in a better chance for those youth to excel in school. The USA appears to have social and educational polices and practices that end up limiting the numbers of poor youth who can excel on tests of academic ability.

How does this relation between poverty and achievement play out? If we broke up American public schools into five categories based on the percent of poor children in a school, as in Table 1, it is quite clear that America's youth score remarkably high if they are in schools where less than 10% of the children are eligible for free and reduced lunch. These data are from the international study of math and science trends completed in 2007. The data presented are fourth-grade mathematics data, but eighth- grade mathematics, and science data at both the fourth and eighth grades,, provide the same pattern (Gonzales et al., 2008). If this group of a few million students were a nation, it would have scored the highest in the world on these tests of mathematics and science. Our youth also score quite high if they are in schools where between 10 and 24.9% of the children are poor. These two groups of youth, attending schools where fewer than 25% percent of the students come from impoverished families, total about 12 million students, and their scores are exceeded by only four nations in the world (Aud et al., 2012).

Our youth perform well even if they attend schools where poverty rates of youth are between 25 and 49.9%. And these three groups of students total about 26 million students, over half the U.S. elementary and secondary public school population. It is quite clear that America's public school students achieve at high levels when they attend schools that are middle- or upper-middle-class in composition. The staff and cultures of those schools, as well as the funding for those schools, appears adequate, overall, to give America all the academic talent it can use.

Table 1. School Level Of Family Poverty And TIMSS Scores, Where The U.S. Average Was 529 And The International Average Was 500 (Gonzales et al., 2008)

Percent of Students at a School Whose Families are in Poverty							
	Less than 10%	10% to 24.9%	25% to 49.9%	50% to 74.9%	More than 75%		
Score on TIMSS	583	553	537	510	479		

On the other hand, children and youth attending schools where more than 50% of the children are in poverty – the two categories of schools with the highest percent of children and youth in poverty – do not do nearly as well. In the schools with the poorest students in America, those where over 75% of the student body is eligible for free and reduced lunch, academic performance is not merely low: it is embarrassing. Almost 20% of American children and youth, about 9 million students, attend these schools. The lack of academic skills acquired by these students will surely determine their future lack of success and pose a problem for our nation.

The schools that those students attend are also funded differently than the schools attended by students of wealthier parents. The political power of a neighborhood and local property tax rates have allowed for apartheid-lite systems of schooling to develop in our country. For example, 48% of high poverty schools receive less money in their local school districts than do low poverty schools (Heuer & Stullich, 2011). Logic would suggest that the needs in the high poverty schools were greater, but the extant data show that almost half of the high poverty schools were receiving less money than schools in the same district enrolling families exhibiting less family poverty.

Table 2 presents virtually the same pattern using a different inter-national test, the PISA test of 2009 (Fleischman, Hopstock, Pelczar, & Shelley, 2010). When these 15-year-old American youth attend schools enrolling 10% or fewer of their classmates from poor families, achieve-ment is well above average in reading, and the same pattern holds for science and mathematics. In fact, if this group of American youth were a nation, their reading scores would be the highest in the world! And if we add in the youth who attend schools where poverty levels range between 10 and 24.9% we have a total of about 26 million youth, constituting over half of all American public school children whose average score on the PISA test is exceeded by only two other developed countries. Given all the critiques of public education that exist, this is a remarkable achieve-ment. But the students in schools where poverty rates exceed 75% score lower, much lower than their wealthier age-mates. In fact, their average scores are below every participating OECD country except Mexico.

Table 2. School Level Of Family Poverty and PISA Scores In Reading, Where The U.S. Average Was 500 And The International Average Was 493 (Fleischman et al., 2010)

Percent of Students at a School Whose Families are in Poverty							
	Less than 10%	10% to 24.9%	25% to 49.9%	50% to 74.9%	More than 75%		
Score on PISA	551	527	502	471	446		

The pattern in these data is duplicated in Australia (Perry & McConney, 2010). And this pattern is replicated in other OECD countries, though not always as dramatically. The pattern seen in our country and many non-OECD nations exists because of a hardening of class lines that, in turn, has been associated with the development of ghettos and hyperghettos to house the poor and minorities (Wacquant, 2002). The hardening of class lines results also in some overwhelmingly wealthy white enclaves. The neighborhood schools that serve these ghettos and hyperghettos are often highly homogenous. Currently, white students attend

schools that are between 90% and 100% minority at a rate that is under 1%. But about 40% of both Hispanic and black students attend schools that are 90% to 100% minority (Orfield, 2009). A form of apartheid-lite exists for these students, and to a lesser but still too large an extent for Native Americans as well.

The grouping of poor minorities into schools serving other poor minorities seems frequently to produce social and educational norms that are not conducive for high levels of school achievement. For example, radio station WBEZ in Chicago (WBEZ, 2010) recently reported that of 491 Illinois schools where the students are 90% poor and also 90% minority, only one school, a magnet school enrolling 200 students, was able to demonstrate that 90% of its students met or exceeded basic state standards. In most states "basic" is acceptable, but not a very demanding standard to meet. Still, this school beat the odds that quite realistically can be computed to be about 491 to 1 in Illinois. Schools with the kinds of demographics these schools have rarely achieve high outcomes. Nevertheless, there is a widespread and continuing myth in America that schools that are 90% minority and 90% poor can readily achieve 90% passing rates on state tests if only they had competent educators in those schools (cf. Reeves, 2000). This apparently can happen occasionally, as seems to be the case in Chicago, but like other educational myths, this is a rare phenomenon, not one that is commonplace.

The believers in the possibilities of "90/90/90," as it is called, are part of a "No Excuses" group of concerned citizens and educators who want to be sure that poverty is not used as an excuse for allowing schools that serve the poor to perform inadequately. But the "No Excuses" and the "90/90/90" advocates can themselves become excuse-makers, allowing vast inequalities in income and high rates of poverty to define our society without questioning the morality and the economic implications of this condition. Ignoring the powerful and causal role of inequality and poverty on so many social outcomes that we value (see below), not merely school achievement, is easily as shameful as having educators use poverty as an excuse to limit what they do to help the students and families that their schools serve.

Our data on school performance and segregation by housing prices ought to be a source of embarrassment for our government, still among the richest in the world and constantly referring to its national commitment to equality of opportunity. Instead of facing the issues connected with poverty and housing policy, federal and state education policies are attempting to test more frequently; raise the quality of entering teachers; evaluate teachers on their test scores and fire the ones that have students who perform poorly; use incentives for students and teachers;

allow untrained adults with college degrees to enter the profession; break teachers unions, and so forth. Some of these policies may help to improve education, but it is clear that the real issues are around neighborhood, family, and school poverty rates, predominantly associated with the lack of jobs that pay enough for people to live with some dignity. Correlated with employment and poverty issues are the problems emanating from a lack of health care, dental care, and care for vision; food insecurity; frequent household moves; high levels of single-parent homes; high levels of student absenteeism; family violence; low birth weight children, and so forth.

Another way to look at this is by interrogating data we already have. For example, if national poverty rates really are a causal factor in how youth perform on tests, then Finland, one of highest-achieving nations in the world on PISA tests, with a childhood poverty rate of about 4%, might perform differently were it instead to have the US childhood poverty rate of about 22%. And what might happen if the USA, instead of the appallingly high childhood poverty rates it currently has, had the childhood poverty rate that Finland has? A bit of statistical modeling by Condron (2011) suggests that the Finnish score on mathematics would drop from a world-leading 548 to a much more ordinary (and below the international average) score of 487. Meanwhile, the U.S.' below-average score of 475 would rise to a score above the international average, a score of 509! A major reduction of poverty for America's youth might well improve America's schools more than all other current educational policies now in effect, and all those planned by the President and the Congress.

THE EFFECTS OF POVERTY AND INEQUALITY ON SOCIAL INDICATORS

Poverty can exist without great inequalities, but in societies where inequalities are as great as in ours, poverty may appear to be worse to those who have little, perhaps because all around them are those who have so much more. So relative poverty, that is poverty in the midst of great wealth, rather than poverty per se, may make the negative effects of poverty all the more powerful. This is a problem for the USA because the USA has the greatest level of inequality in income of any wealthy nation in the world (Wilkinson & Pickett, 2010). This hurts our nation in many ways. For example, when you create an index composed of a number of factors reflecting the health of a society, including such things as teenage birth rate, infant mortality rate, ability to achieve in life independent of family circumstances, crime rate, mental illness rate, longevity, PISA performance, and so forth, a powerful finding emerges. The level

of inequality within a nation—not its wealth—strongly predicts poor performance on this index made up of a multitude of social outcomes! In the USA this finding also holds across our 50 states: Inequality within a state predicts a host of negative outcomes for the people of that state.

Indicator 1. Child Well-Being

As measured by UNESCO, children fare better in Finland, Norway, or Sweden, each of which has a low rate of inequality. But child well-being is in much shorter supply in England and the USA, each of which has high rates of inequality (Wilkinson & Pickett, 2010). Schools, of course, suffer when children are not well taken care of. The problems associated with inequality and poverty arrive at school at about 5 years of age, and continue through graduation from high school, except for the approximately 25% of students who do not graduate on time, the majority of whom are poor and/or minority (Aud et al., 2012).

Indicator 2. Mental Health

The prevalence of all types of mental illness is greater in more unequal countries, so the USA with its high rate of inequality has more than double the rate of mental illness to deal with than do Japan, Germany, Spain, and Belgium. The latter countries each have relatively low rates of income inequality (Wilkinson & Pickett, 2010). How does this affect schools? The prevalence rate for severe mental illness is about 4% in the general population, but in poor neighborhoods it might be 8% or more, while in wealthier neighborhoods that rate might be about 2%. Imagine two public schools each with 500 youth enrolled, one in the wealthy suburbs and one in a poor section of an inner city. As in most public schools, administrators and teachers try to deal sympathetically with students' parents and families. The wealthier school has 10 mentally ill families and their children to deal with, while the school that serves the poorer neighborhood has 40 such families and children to deal with. And as noted, almost 50 percent of these schools get less money than do schools in their district that are serving the wealthier families. Thus inequality and poverty, through problems associated with mental health, can easily overburden the faculty of schools that serve poor youth, making it harder to teach and to learn in such institutions.

Indicator 3. Illegal Drug Use

Illegal drug use is higher in countries with greater inequalities. And the USA is highest in inequality among wealthy nations. So rates of illegal

drug use (opiates, cocaine, cannabis, ecstasy, and amphetamines) are dramatically higher than in the northern European countries, where greater equality of income and lower rates of poverty exist (Wilkinson & Pickett, 2010). High-quality schooling in communities where illegal drugs are common among youth and their families is hard to accomplish. That is especially true when the commerce in the neighborhood the school serves is heavily dependent on drug sales. This occurs in many urban and rural communities where employment in decent paying jobs is unavailable.

Indicator 4 and Indicator 5. Infant and Maternal Mortality

The tragedy associated with infant mortality occurs much more frequently in more unequal countries than in more equal countries. Thus, the USA has an infant mortality rate that is well over that of other countries that distribute wealth more evenly than we do (Wilkinson & Pickett, 2010). Recent data reveal that 40 countries have infant mortality rates lower than we do (Save the Children, 2011). American children are twice as likely as children in Finland, Greece, Iceland, Japan, Luxembourg, Norway, Slovenia, Singapore, or Sweden to die before reaching age 5. A woman in the USA is more than 7 times as likely as a woman in Italy or Ireland to die from pregnancy-related causes. And an American woman's risk of maternal death is 15-fold that of a woman in Greece (Save the Children, 2011). The average overall American rate is much worse in poor states like Mississippi. And the rate of those tragedies is even higher still for African Americans and other poor people who live in states like Mississippi. Comparisons with other nations make it quite clear that our system of medical care is grossly deficient.

But here is the educational point: Maternal and infant mortality rates, and low birth weights, are strongly correlated. Every low-birth-weight child has oxygen and brain bleeding problems that produce minor or major problems when they show up at school five years later. So inequality and poverty—particularly for African Americans—are affecting schooling though family tragedy associated with childhood deaths, and through low birth weights that predict poor school performance.

Indicator 6. School Dropouts

In the USA if you scale states from those that are more equal in income distribution (for example Utah, New Hampshire, and Iowa) to those that are much more unequal in the distribution of income (for example Louisiana, Alabama, and Mississippi) a strong trend appears. Dropout rates are much higher in the more unequal states (Wilkinson & Pickett,

2010). Poverty and a lack of hope for a good future take their toll on youth in the more unequal states and students drop out of school at high rates. This costs our society a great deal of money through increased need for public assistance by these youth, the loss of tax revenues from their work, and the higher likelihood of their incarceration. Inequality and the poverty that accompanies it take a terrible toll.

Indicator 7. Social Mobility

Despite the facts, the USA prides itself on being the nation where a person can be anything they want to be. But if that was ever true, and that is debatable, it is now less true than it has been. In reality, social mobility is greater in nations that have greater equality of income than our country does (Wilkinson & Pickett, 2010). We now know that the correlation of income between siblings in the Nordic countries is around .20, indicating that only about 4% of the variance in the incomes of siblings could be attributable to joint family influences. But in the U.S., the correlation between the income of siblings is over .40, indicating that about 16% of the variance among incomes of siblings in the U.S. is due to family (Jantti, Osterbacka, Raaum, Ericksson, & Bjorklund, 2002). These data support the thesis that the Nordic countries are much more meritocratic than the U.S.

Family, for good or bad, exerts 4 times the influence on income earned by siblings in the U.S. than in the Nordic countries. Sibling income also provides evidence that class lines in the U.S. are harder to overcome today than previously. Sibling incomes have grown quite a bit closer in the U.S. over the last few decades, indicating that family resources (having them or not having them) play an increasing role in a child's success in life. Data informs us that only 6% of the children born into families in the lowest 20% of income (often about \$25,000 a year or less) ever get into the top 20% in income (about \$100,000 or more per year). Now, in the USA, our parents are a greater determiner of our income in life than either our weight or our height. That is, your parents' station in life determines your station in life to a much greater degree than we ever thought. Despite our myths, it turns out that among the wealthy nations of the world, except for Great Britain, we have the lowest level of income mobility – that is, the highest rate of generational equality of income (Noah, 2012). Income heritability is greater and economic mobility therefore lower in the United States than in Denmark, Australia, Norway, Finland, Canada, Sweden, Germany, Spain, and France. "Almost (arguably every) comparably developed nation for which we have data offers greater income mobility than the United States" (Noah, 2012, p. 35). Yet we are the nation with the most deeply ingrained myths about how we are a self-made people!

Indicator 8. School Achievement

At least one reason for this lack of movement in generational income is the increasingly unequal schooling provided to our nation's middle- and lower-class children. Sean Reardon (2011) has built a common metric for test data from the 1940s through to the mid-2000s. He convincingly shows that the gap in scores between youth whose families are in the 90th percentile in income, and youth whose families are in the 10th percentile in income, is now dramatically greater than it was. In the 1940s the gap between rich and poor youth (youth from families in the 90th percentile versus youth from families in the 10th percentile in income) was about .6 of a standard deviation on achievement tests. This is a large difference, but still, the curves of achievement for poorer and richer youth overlap a great deal. Many poor students score higher than many rich students, and many rich students score lower than many poor students. But in recent times—the 2000s—the gap between youth from the 90th and youth from the 10th percentile families has grown wider. Now the difference between children from these two kinds of families is about 1.25 standard deviations, with much less overlap between the two groups of young Americans. Since we live in a world where income and income stability are highly correlated with education, these data mean that more of the better-off children will succeed and more of the less-well-off youth will fail to make a good living. The rich are getting richer (in educational terms, which translates into annual salary), and the poor are getting poorer (in both educational opportunities and in the income that accompanies educational achievement). Our nation cannot stand as we know it for much longer if we allow this inequality in opportunity to continue.

Indicator 9. Teenage Birth Rate

Despite the fact that the birth rate for teens in the United States is going down, we still have the highest teenage birth rate in the industrialized world. That is surely related to the strong relationship between income inequality in a society and teen pregnancy rates (Wilkinson & Pickett, 2010). The USA has, by far, the highest level of inequality among wealthy nations. So, not surprisingly, the USA also has by far the highest rate of teenage pregnancy. Poverty, the result of great inequality, plays a role in this, as demonstrated with some California data (Males, 2010). In Marin County, one of the wealthiest counties in America, with a poverty rate for whites in 2008 of about 4%, the teenage birth rate per 1,000 women ages 15-19 was 2.2. In Tulare County, one of the poorest counties in the USA, Hispanic teens had a poverty rate of about 41% in 2008, while the teenage birth rate was 77.2 per 1,000 women ages 15-19. While that

difference is astounding, among Tulare County black teens, with a similar poverty rate, the teenage birth rate was about 102 per 1,000 women between 15 and 19 years of age. Inequality and poverty are strongly associated with rate of teenage pregnancies.

But poverty has relationships with other characteristics of families, and among them is a higher rate for impoverished youth to experience abuse, domestic violence, and family strife during their childhood (Berliner, 2009). Girls who experience such events in childhood are much more likely to become pregnant as teenagers, and that risk increases with the number of adverse childhood experiences she has. This kind of family dysfunction in childhood has enduring and unfavorable health consequences for women during the adolescent years, childbearing years, and beyond. And this all ends up as social problems, because teenage pregnancy is not only hard on the mother, it is hard on the child, and it is also hard on the school that tries to serve them.

Indicator 10. Rates of Imprisonment

Imprisonment rates are higher in countries with more unequal income distribution (Wilkinson & Pickett, 2010). The USA, with its high rate of inequality, also has, by far, the highest rate of imprisonment among the wealthy countries, but also appears to have more prisoners per capita than almost every other country in the world. We punish harshly, and the poor and poor minorities are punished a lot more, and for longer times, than are their white and wealthier fellow citizens. Michelle Alexander (2010) vividly describes the new "Jim Crow" laws that incarcerate poor black youth at much higher rates than wealthy white students, even when the laws that were broken were identical. Human Rights Watch (2000, 2002) identifies the USA as unique in its desire to punish, and particularly to punish by social class. Their data show that in many states whites are more likely to violate drug laws than people of color, yet black men have been admitted to prison on drug charges at rates 20 to 50 times greater than those of white men. They found, as well, that Hispanics, Native Americans, and other people of color who are poor, are incarcerated at rates far higher than their representation in the population.

For example, a decade ago in Connecticut, for every 11 white males incarcerated, there were 254 black men and 125 Hispanics, suggesting a strong bias in sentencing (Human Rights Watch, 2002). While some of these males were family men, and their imprisonment hurt their family, many of the poor and minority people incarcerated were women, and their imprisonment was much more likely to hurt their children's chances for success. In 15 states, black women were incarcerated at rates

between 10 and 35 times greater than those of white women, while in eight states, Latinas were incarcerated at rates between 4 and 7 times greater than those of white women. And if we hope that youthful offenders would be helped by sentencing to prison, we must wonder why six states incarcerated black youth under age 18 in adult facilities at rates between 12 and 25 times greater than those of white youth. Similarly, in four states, Hispanic youth under age 18 were incarcerated in adult facilities at rates between 7 and 17 times greater than those of white youth. In these states, particularly, rehabilitation and education seem not to be the goal of the state. Rather, the goal seems to be the development of a permanent criminal class for black and Latino youth. It is not far-fetched to point out that in a nation with a large and growing private prison system, a permanent prison class ensures permanent profits!

As tragic as the biases seen in the ways U.S. law is administered in many states are, the after effects for incarceration may even be worse! That is because, once released, former prisoners find it difficult or impossible to secure jobs, education, housing, and public assistance. And in many states, they cannot vote or serve on juries. Alexander (2010) rightly calls this situation as a permanent second-class citizen a new form of segregation. For the men and women who hope to build better lives after incarceration, and especially for the children and youth in their families, family life after paying back society for their crimes seems much more difficult than it should be.

POLICIES FOR IMPROVING EDUCATION AND INCOME EQUALITY

It is hard to argue against school reformers who want more rigorous course work, higher standards of student performance, the removal of poor teachers, greater accountability from teachers and schools, higher standards for teacher education, and so forth. I stand with them all! But in various forms and in various places, all of that has been tried and the system has improved little—if at all. The current menu of reforms simply may not help education improve as long as we refuse to notice that public education is working fine for many of America's families and youth, and that there is a common characteristic among families for whom the public schools are failing. That characteristic is poverty brought about through, and exacerbated by, great inequality in wealth. The good news is that this can be fixed.

First, of course, is through jobs that pay decently so people have the dignity of work and can provide for their children. To do that we need a fair wage, or a living wage, rather than a minimum wage. This would ensure that all workers could support themselves and their families at a

reasonable level. The current minimum wage is set at \$7.25 an hour, and would net a full-time worker under \$15,000 per year. That is not much in our present economic system. The U.S. government sets the poverty level at \$22,050 for a family of four in most states. But for a family to live decently on \$22,050 is almost impossible. At this writing, fair wages/living wages might well require more like \$12.00 an hour in many communities. That would certainly raise the price for goods and services, but it would also greatly stimulate local economies and quite likely save in the costs for school and the justice system in the long run.

Our nation also needs higher taxes. You cannot have a commons, that is, you cannot have teachers and counselors, librarians and school nurses, coaches for athletics and mentors in technology, without resources to pay them. Nor can you have police and fire services, parks and forest service personnel, bridges and roads, transportation systems, medical care, service to the elderly and the disabled, and so forth, without taxes to pay for jobs in these areas. Schools, parks, health care, public support of transportation, police and fire protection, et cetera, are either basic rights that citizens in a democracy enjoy, or not. If the former, then government needs to employ directly or through private enterprise the people to provide those services. Either of those two strategies, government jobs or government support for private jobs that help to preserve the commons, requires revenue.

Despite the distortions in the press and the vociferous complaints by many of its citizens, the facts are clear: The USA has an extremely low tax rate compared to any of the OECD countries, the wealthier countries of the world. Only two countries pay a lower rate of taxes relative to Gross Domestic Product, while 29 countries pay more in taxes, and countries like Denmark, Finland, France, Italy, Norway, and Sweden, pay about 75% more in taxes than we do to support civic life (Citizens for Tax Justice, 2011). This provides the citizens of those countries such things as free preschools medical, dental and vision care; support for unemployed or single women; no food insecurity among the poor; free college if you pass the entrance examination; and so forth.

Beyond the low tax rate, the USA also has many highly profitable corporations that pay *less* than nothing in taxes. That is, they not only pay no taxes, they get rebates! Table 3 shows that much more tax revenue should be obtainable from U.S. corporations if we would elect politicians who understand that the commons will disappear if corporations are not contributing to its maintenance.

Increased tax revenues could provide more public sector jobs to help both our nation and our schools do better. Some of the money raised for the betterment of the commons could be used for high-quality early childhood education for the children of poor families. Replicable research teaches us a near-certain method to reduce the population of poor youth that end up in jail. That is reliably accomplished by providing poor children with access to high-quality early childhood education. Nobel Laureate economist James Heckman studied the Perry Preschool program, in which children from poverty homes attended a high-quality preschool. The effects of that program in adulthood are remarkable.

A high-quality preschool, of course, requires "up-front" tax dollars to be spent, but ultimately saves society billions of dollars. Heckman and colleagues (Heckman, Seong, Pinto, Savelyev, & Yavitz, 2010) showed a 7% to 10% per year return on investment based on increased school and career achievement of the youth who were in the program, as well as reduced costs in remedial education, health care, and avoidance of the criminal justice system. Similarly the Chicago Child Parent Center Study (Reynolds, Temple, Robertson, & Mann, 2001) was estimated to return about \$48,000 in benefits to the public, per child, from a half-day public school preschool for at-risk children. In the Chicago study, the participants, at age 20, were more likely to have finished high school—and were less likely to have been held back, need remedial help, or to have been arrested. The estimated return on investment was about \$7.00 for every dollar invested. In the current investment environment these are among the highest returns one can get. Sadly, however, America would rather ignore its poor youth and then punish them rather than invest in them, despite the large cost savings to society in the long run!

Another policy proven to improve the achievement of poor youth is to provide small classes for them in the early grades. There is ample proof that this also saves society thousands of dollars in the long run, though it requires extra funding in the short run. Biddle & Berliner (2003) reviewed the famous randomized study of small class size in Tennessee, the Milwaukee STAR study, some reanalyses by economists of original research on class size, a meta-analysis, and reviews of classroom processes associated with lower class size, and found that class sizes of 15 or 17 in the early grades have long-term effects on the life chances of youth who come from poverty homes and neighborhoods. Instead of firing teachers and raising class sizes, as we have done over the last few years because of the Great Recession, we should instead be adding teachers in the early grades to schools that serve the poor. Using those teachers to reduce class size for the poor will result in less special education need, greater high school completion rates, greater college attendance rates, less incarceration, and a more just society, at lower costs, over the long run.

Another policy with almost certain impact is the provision of summer educational opportunities that are both academic and cultural for poor youth (Cooper, Nye, Charlton, Lindsay, & Greathouse, 1996). Youth of the middle class often gain in measured achievement over their summer school holiday. This is a function of the cultural and study opportunities that their parents arrange. Youth from the lower classes have fewer such opportunities and so, as a group, they either do not gain in achievement, or lose ground over the summer. Small investments of dollars can fix that, leading to better school achievement. This is why we need more money invested in the commons now, so our nation will be a more equitable one in the future.

Another educational reform policy, like imprisonment, is based on a punishment-oriented way of thinking, not a humane and research-based way of thinking. This is the policy to retain children in grade who are not performing at the level deemed appropriate. As this paper is being written, about a dozen states have put new and highly coercive policies into effect, particularly to punish third graders not yet reading at the level desired. Although records are not very accurate, reasonable estimates are that our nation is currently failing to promote almost 500,000 students a year in grades 1-8. Thus, from kindergarten through eighth grade it is likely that about 10% of all public school students are left back at least once, a total of about 5 million children and youth. Research informs us that this policy is wrong for the overwhelming majority of the youth who we do leave back. Research is quite clear that on average, students left back do not improve as much as do students who are allowed to advance to a higher grade with their age mates. Furthermore, retention policies throughout the nation are biased against both boys and poor minority youth. Moreover, the retained students are likely to drop out of school at higher rates than do their academic peers who were advanced to the next grade.

Of course mere advancement in grade does not solve the problem of poor academic performance by some of our nation's youth. But there is a better solution to that problem *at no more cost than retention*. Children not performing up to the expectations held for their age group can receive tutoring, both after school and in summer. On average, the cost to a school district is somewhere about \$10,000 per child per year to educate in grades K-8. That \$10,000 is the fiscal commitment made by a district or a state when it chooses to leave a child back to receive an additional year of schooling. That same amount of money could be better used for small group and personal tutoring programs over a few years to help the struggling student to perform better. This is precisely the method used by wealthy parents of slow students to get their children to achieve well in school. As Dewey reminded us many years ago, what the best and wisest parents want for their children should be what we want for all children.

Thus, that same kind of opportunity to catch up in school should not be denied to youth who come from poorer families. And for the record, Finland, whose school system is so exceptional, shuns retention in grade. It retains only about 2% of its students, not 10%, using special education teachers to work with students who fall significantly behind their age mates, ensuring that for most slow students there are chances to catch up with their classmates, without punishing them.

Other policies that would help the poor and reduce the inequities we see in society include reducing teacher "churn" in schools. Lower-class children experience more of that, and it substantially harms their academic performance (Ronfeldt, Lankford, Loeb, & Wyckoff, 2011). Policies to help experienced teachers stay in schools with poorer students also need to be developed. New teachers rarely can match a veteran of five or more years in accomplishing all the objectives teachers are required to meet in contemporary schools.

A two-year visiting nurse service to new mothers who are poor costs over \$11,000 per family serviced. But results 10 years later show that in comparison to matched families, both the mothers and the children who were visited were significantly better off in many ways, and the cost to the local community was \$12,000 less for these children and families over those 10 years. Even greater benefits to the community are expected in the future (Olds et al., 2010). In essence, there is really no cost at all for a humane and effective program like this, but humaneness, even when cost effective, seems noticeably lacking in many of our communities.

Related to the visiting nurse study is the high likelihood of success by providing wrap-around services for youth in schools that serve poor families. Medical, dental, vision, nutrition, and psychological counseling, if not accessible by the families in a community, need to be provided so the children of the poor have a better chance of leaving poverty in adulthood. These programs have become increasingly of interest since both the social sciences and the neurosciences have now verified, through studies of brain functioning and cognitive processing, that the stress associated with extreme poverty reduces a child's ability to think well. Stress and academic problem solving ability, and stress and working memory, correlate negatively. Thus, the cognitive skills of many poor youth are diminished, making life much harder for them and their teachers. The greater the physical and psychological stress experienced during childhood, the higher the likelihood that a child will not do well in school or in life. Noted earlier, however, is that the American media loves the story of the child from awful surroundings—war, famine, family violence, drug use, crime, and so forth—who grows to become a respected pillar of the community. But that is the exception, not the rule! Educational and social policies need to be made on the basis of the general rule, not on the occasional exception, dramatic and noble as that exception may be.

Adult programs also need to be part of schools so the school is part of its community: health clinics, job training, exercise rooms, community political meetings, technology access and training, libraries, and so forth—often help schools to help poor families. It is not good for children, their adult caretakers, or a school district if the public schools are seen as remote, alien, foreign, hostile, or anything other than a community resource. What seems evident is that America simply cannot test its way out of its educational problems. Our country has tried that and those policies and practices have failed. It is long past the time for other policies and practices to be tried, and as noted, some fine candidates exist.

CONCLUSION

During the great convergence in income, from World War Two until about 1979, American wealth was more evenly spread and the economy hummed. With the great divergence in income, beginning in about 1979, and accelerating after that, American wealth became concentrated and many factors negatively affected the rate of employment. The result has been that despite our nation's great wealth, inequality in income in the USA is the greatest in the Western World. Sequelae to high levels of inequality are high levels of poverty. Certainly poverty should never be an excuse for schools to do little, but poverty is a powerful explanation for why they cannot do much!

Although school policies that help the poor are appropriate to recommend (preschool, summer programs, health care, and so forth), it is likely that those programs would be less needed or would have more powerful results were we to concentrate on getting people decent jobs and reducing inequality in income. Jobs allow families, single or otherwise, to take care of themselves and offer their children a more promising future. Too many people without jobs do bad things to themselves and to others. Literally, unemployment kills: The death rates for working men and women increase significantly as unemployment increases (Garcy & Vagero, 2012). The death of adult caretakers obviously affects families, particularly children, in profound ways. Government promotion of decent paying jobs, and a low unemployment rate, is a goal around which both Conservatives and Liberals who care about the American education system ought to unite. That is the single best school reform strategy I can find.

But more than that, it is part of my thinking about rights we should expect as citizens of our country, in order that our country thrives. President Franklin Delano Roosevelt articulated these rights as he addressed the

nation, shortly before he died (Roosevelt, 1944). His experience with both the Great Depression, the rise of fascism, and the second world war led him to offer Americans a second bill of rights that would help promote what was originally offered to Americans a century and half before—the right of our citizens to pursue happiness. Roosevelt said that Americans have come to a clear realization of the fact that true individual freedom cannot exist without

economic security and independence. Necessitous men are not free men. People who are hungry and out of a job are the stuff of which dictatorships are made. [It is now self-evident that the American people have] the right to a useful and remunerative job . . . the right to earn enough to provide adequate food and clothing and recreation; the right of every family to a decent home; the right to adequate medical care and the opportunity to achieve and enjoy good health; the right to adequate protection from the economic fears of old age, sickness, accident, and unemployment; The right to a good education.

I think we need to fight as hard for our second bill of rights as we did for our first. Among the many reasons that might be so is that the performance of our students in our schools cannot be thought about without also thinking of the social and economic policies that characterize our nation. Besides the school policies noted above, and the need for decent jobs, if we had a housing policy that let poor and middle-income children mix in schools, that might be better than many other school improvement strategies designed specially to help the poor. This is a policy that works for Singapore, a nation with great inequalities in wealth and greater equalization of achievement outcomes between its richer and poorer students. If we had a bussing policy based on income, not race, so that no school had more than about 40% low-income children, it might well improve the schools' performances more than other policies we have tried. This is the strategy implemented by Wake County, North Carolina, and it has improved the achievement of the poor in Raleigh, North Carolina, the county's major city, without subtracting from the achievements of its wealthier students (Grant, 2009). My point is that citizens calling for school reform without thinking about economic and social reforms are probably being foolish. The likelihood of affecting school achievement positively is more likely to be found in economic and social reforms, in the second bill of rights, than it is in NCLB, the common core of standards, early childhood and many assessments after that, value-added assessments, and the like. More than educational policies are needed to improve education.

I think everyone in the USA, of any political party, understands that poverty hurts families and affects student performance at the schools their children attend. But the bigger problem for our political leaders and citizens to recognize is that inequality hurts everyone in society, the wealthy and the poor alike. History teaches us that when income inequalities are large, they are tolerated by the poor for only so long. Then there is an eruption, and it is often bloody! Both logic and research suggest that economic policies that reduce income inequality throughout the United States are quite likely to improve education a lot, but even more than that, such policies might once again establish this nation as a beacon on a hill, and not merely a light that shines for some, but not for all of our citizens.

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