INFORMATION CAPSULE
Research Services
Vol. 1004
September 2010
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Out-of-School Factors Affecting Academic Achievement

At a Glance

This Information Capsule is the third in a series of papers addressing factors contributing to low academic achievement. The two previous papers addressed issues relevant to class size reduction and teacher quality/preparation. The premise of this Information Capsule is that there is no single smoking gun relative to improving school performance. Solving the challenges confronting education cannot be solved by one, two or even three reform strategies. Neither "fad" nor popular flavor of the month reform strategy will do the job. Rather, the case can be made that a comprehensive approach comparable to the War on Poverty of the 1960s or the present War on Terror is what is needed to make substantial headway in solving the economic, social, and familial problems reflected in today's public schools.

The popular assumption is that bad schools are the most important reason for low achievement. To remedy the situation one need only address school outcomes by developing high standards, testing, and school accountability measures without addressing the underlying problematic "inputs." This paper will address what these inputs are and the dramatic impact they have on educating students.

It goes without saying that improvements should be made in public schools; however, it is also clear that schools are not the sole problem. Public schools are mirrors reflecting the socio-cultural, economic, and political problems existing in the neighborhoods and communities in which they are located. Schools do not cause the achievement gap. The gap between high and low income children exists far before formal education begins. Schools are forced to play catch-up and generally diminish the inequalities produced by the out-of-school factors discussed in this Information Capsule. Unfortunately, long standing generational inequalities are not easily remedied or eliminated.

The achievement gap among White, Black, and Hispanic students still persists nationally despite improvements in classroom technology, innovative curriculum, and expenditures of large sums of money. In fact, recent evidence indicates that the gap has actually widened (Harris and Herrington, 2006). Schools are generally held responsible for these gaps despite the fact that the individual differences responsible for them are present before children even start school.

Teachers have been singled out as being primarily responsible for the unsuccessful education outcomes achieved by many students. In contrast, a number of researchers believe that the gap will never be closed until public policy provides remedies for the out-of-school factors and the social structure of inequality that can exert negative influence on school performance. The main problem with out-of-school factors is that they are associated with income, race/ethnicity, and too many children attend schools segregated by these same attributes (Berliner, 2009).

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The premise of this Information Capsule is that there is no single smoking gun relative to improving school performance. Barton and Coley (Educational Testing Service; ETS) prepared a report in 2009, *Parsing the Achievement Gap II,* wherein they identified 16 "life and school conditions" the research community agreed were correlated with cognitive development and school achievement. These factors included:

- Parent participation
- Student mobility
- Birth weight
- Lead poisoning
- Hunger and nutrition
- Reading to young children
- Television watching
- Parent availability
- Summer gain or loss
- Rigor of school curriculum
- Teacher preparation
- Teacher experience
- Teacher turnover
- Class size
- Technology-assisted instruction
- School Safety

Solving the challenges confronting education cannot be solved by one, two or even three reform strategies. Neither "fad" nor popular flavor of the month reform strategy will do the job. Rather, the case can be made that a comprehensive approach comparable to the War on Poverty of the 1960s or the present War on Terror is what is needed to make substantial headway in solving the economic, social, and familial problems reflected in today's public schools. Some may say NCLB is in fact akin to the War on Poverty. If that is indeed the case, then the time, effort, and funds are being directed toward the wrong set of solutions and causal factors. This view gains support given the overall goal of NCLB was to eliminate the achievement gap and recent evidence indicates that the gap is widening on a national basis.

The popular assumption is that bad schools are the most important reason for low achievement. To remedy the situation one need only address school outcomes by developing high standards, testing, and school accountability measures without addressing the underlying problematic "inputs." This paper will address what these inputs are and the dramatic impact they have on educating students. This notion is expressed best by David Berliner (2009).

> "Inputs to schools matter. As wonderful as some teachers and schools are, most cannot eliminate inequalities that have their roots outside their doors and that influence events within them. The accountability system associated with NCLB is fatally flawed because it makes schools accountable for achievement without regard for factors over which schools have little control. In part, for this reason, NCLB is failing to show reductions in the achievement gaps on which it is focused. A broader, bolder approach to school improvement is indeed required. It would begin by a reasonable level of social accountability for children's physical and mental health and safety. At that point, maybe we can sensibly and productively demand that schools be accountable for comparable levels of academic achievement for all American children." (P. 40)

The following sections address two important contributing factors regarding how the nation came to believe schools were at fault for all the ills distressing the nation's education system. The first refers

to the “high flying” schools supposedly exemplifying the ease with which schools should be able to improve high poverty schools. The second addresses the notion that to blame the students for their own problems is tantamount to racism. It will be shown that it is not the children themselves but rather the environments in which they grow and develop that must be confronted.

“High-Flying” Schools

The so-called “high-flying” schools refer to the research that showed high poverty and high minority schools achieving a high level of academic performance. This evidence has been used by groups such as the Education Trust and Heritage Foundation to propose the notion that overcoming poverty is relatively easy and the schools themselves are to blame for low achievement. In fact, the Education Trust (Jerald, 2001) found 3,592 schools that met their criteria. Although this number seems large, it is actually a small proportion of high-poverty schools in the nation. In addition, the criterion used for high poverty was set at 50 percent of the students receiving free-and-reduced-price lunch. At this level, 81 percent or approximately 345 public schools in Miami-Dade County would have been included in the sample of prospective “high flying” schools. Finding high achieving schools with such an over-inclusive definition of poverty would actually be expected.

Another main methodological problem with the Education Trust research, as explained by Harris (2006) and others, is that the operational definition of high achievement required such achievement in only one subject for only one grade during only one year. As Harris (2006) explained, this resulted in a school being labeled as “high flying” even if students could not read or solve basic mathematics problems. Therefore, high achievement was not required to be consistently high but rather high for a short period of time and in only a single subject area. Students could have excelled in one subject but failed in another. The Education Trust did not require schools to display high achievement over time or in different grade levels or in multiple subjects. It therefore was misleading to refer to an entire school as “high flying” when using such meager performance standards.

Educational researchers know that individual test scores are unreliable and can vary from year to year and from grade to grade. Reform efforts should use multiple testing points over of a period of time before important academic decisions are made in relation to students and before career altering decisions are made concerning teachers. That is exactly what has been proposed for the reauthorization of the NCLB. Federal law will no longer require measurement on a single year but rather growth from year-to-year will be assessed. This strategy was not used by the majority of studies addressing so-called “high-flying” schools.

The Heritage Foundation report (Carter, 1999), *No Excuses* shares similarities to the above mentioned research conducted by the Education Trust. As discussed in Harris (2006), the Heritage Foundation studied 400 schools brought to their attention by think tanks and foundations. The group reduced the initial list of schools to 125 schools which were exemplified by high poverty and high test scores. Twenty-one of these schools were scheduled for site visits and additional analysis. The selection criteria included schools where 75 percent of the students received free and reduced price lunch (an improvement over the 50 percent used by the Education Trust).

As Harris (2006) reported, although the schools selected were in fact very effective there were unique circumstances surrounding them. For instance, nine of the 21 or 45 percent of the schools had admission requirements that could exclude students who received low test scores. In addition, a subsequent independent analysis certified that only three out of the 21 schools or 14 percent could actually be labeled “high flying.”

There is no doubt that high poverty and high minority schools can excel on academic achievement tests. However, it is disingenuous to imply as many think tanks did that they are commonplace and

ask why everyone isn't getting the same results. Therefore, the seminal research efforts touted by many and used to condemn public schools and public school teachers were ill conceived and misleading.

Unfortunately, the harm was done when the research went unchallenged for a prolonged period of time. The damaging "propaganda" had already influenced public opinion in negative ways and had damaged the reputation and integrity of the nation's public schools. There are numerous examples of similar occurrences in the popular media of politically motivated so-called "think tanks" publishing ill-conceived research findings. Frequently, these reports only serve to further the author's particular political agenda for presentation in the popular media as opposed to being published in peer-reviewed professional journals where well-designed and well-conceived research studies are reviewed for suitability before being published.

Considering Out-of-School Factors Is Tantamount to Racism

An additional notion equates accounting for student inputs as contributing factors of low achievement with racism. The argument poses two alternative explanations for low academic achievement or the lack of equity seen in school learning. As Kati Hacock, the current President of the Education Trust (2002) has asserted, "How many effective schools do we have to see in this country before we conclude that it's not about the kids?" implying schools are at fault and you can't blame the victim. The other side of Ms. Hacock's argument amounts to, so if it isn't the schools the only other explanation must be that some children are incapable of learning. Therefore, according to this logic, you either believe that schools are at fault or you believe in racist reasoning.

There is an alternative explanation to both of these untenable positions and this alternative is confirmed by legitimate educational research. This alternative interpretation asserts that some students grow up in less than ideal circumstances and endure their developmental years in what some refer to in the literature as "toxic" environments and neighborhoods. As a result of these early experiences or the lack thereof, these children are at a disadvantage in learning and in school activities. It may not be about the "kids" but it is about the environmental conditions in which the "kids" live and grow. As Harris explained, "The belief that these factors are important is far from racism."

Harris (2006) included an appropriate analogy. When then-President Lyndon Johnson promoted affirmative action, he reasoned that undernourished students would lose many races, not because of inept track coaches who did not try hard enough or who didn't care but rather because the students lacked the strength and endurance due to being undernourished or food deprived. The logic proposed by the Education Trust and similar political action groups as well as some federal legislation would have us believe that the undernourishment should be ignored as well as other socioeconomic disadvantages. To ignore these disadvantages is to do nothing about remedying the circumstances in which many American children live. The logic initiated by framers of NCLB at the time was to eliminate any excuses schools could use for underperforming.

It is the position of this Information Capsule that it is unconscionable to ignore such negative life circumstances and their immense impact on learning. Unfortunately, present legislation and callous public opinion assumes schools are solely responsible for low academic achievement which completely ignores the vast individual differences that typify human beings. Students start at very different places on a long continuum of academic skill and many schools are punished for family and community issues that are outside of their control.

The following two sections address the dramatic effect poverty has on school learning and out-of-school factors which have been identified by research. This material has been taken directly from *The Effect of Poverty on Student Achievement* (Blazer & Romanik, 2009). This Information Capsule can be retrieved online at the Research Services web site (drs.dadeschools.net).

Effect of Poverty on Student Achievement

The National Center for Children in Poverty reported that in 2007, 13.2 million American children (18 percent of all children in the country) were living in poverty (Douglas-Hall & Chau, 2008). According to the U.S. Census Bureau (2006), 110,640 Miami-Dade County children under the age of 18 (or 19.6% of the county's children) were living in poverty in 2006. Because of the weak economy and higher unemployment and foreclosure rates, school districts across the country are reporting increases, some as high as 40 percent, in the number of homeless students enrolled in their schools over the past year (Abramson, 2009; Adamsick, 2009; Herndon, 2009; Huus, 2009; Kingsbury, 2009; Duffield & Lovell, 2008). During the 2007-08 school year, 2,382 homeless students enrolled in Miami-Dade County Public Schools, an 8 percent increase from 2006-07 (Daniel, 2009).

Childhood poverty poses serious problems for public education. Children raised in poverty generally achieve at lower levels than their more advantaged peers and researchers have found that income level is one of the most powerful predictors of students' academic performance (Reeves, 2009; Levin, 2007; Pellino, 2007; Butler, 2006; Nelson, 2006; Rowan et al., 2004). The American Association of School Administrators (2008) stated: "The many and varied effects of poverty form the single greatest factor limiting student achievement. The most prevalent and persistent gaps in student achievement are a result of the effects of poverty."

Researchers have long recognized that both the individual background characteristics of students and the compositional characteristics of their school's student body can affect student achievement. Although studies indicate that low income students generally have lower levels of academic achievement than their more affluent peers, the number of economically disadvantaged students attending a school also affects student performance. All students, whether they are from low, middle, or high income backgrounds, have been found to have lower levels of achievement when they attend schools with high concentrations of poor students.

Out-of-School Factors Affecting Learning

Non-school factors play a major role in student learning. Schools do not operate in a vacuum and children's home lives have a strong influence on their academic performance. Each non-school factor may cause only a small decrease in students' performance, but when combined, they can lead to significant increases in the achievement gap (Berliner, 2009; Rothstein, 2008; Clabaugh, 2007; Hampden-Thompson & Johnston, 2006; Evans, 2004). The American Association of School Administrators (2008) stated that addressing each non-school factor is critical to eliminating the achievement gap.

Following is a description of non-school factors that have a negative influence on low income students' levels of academic achievement.

- **Prenatal disadvantages**. Schools with larger proportions of economically disadvantaged students enroll greater numbers of children born at low birth weights. Studies have found that children born at low birth weights have IQs ranging from nine to 11 points lower than children born at standard weights (Barton & Coley, 2009; Berliner, 2009; Renchler, 1993). Lower birth weights have also been linked to greater frequencies of attention deficit hyperactivity disorders. In addition, women living in poverty are more likely to use alcohol, tobacco, or cocaine while pregnant; more likely to experience higher levels of stress and anxiety during their pregnancies; and less likely to get a flu shot (influenza during critical periods of pregnancy has been associated with higher rates of schizophrenia) (Berliner, 2009; Rothstein, 2008; Pellino, 2007).

One cause of low birth weight is preterm deliveries or gestation periods of less than nine months. Such preterm infants are born to Black parents 58 percent more frequently then they are to White parents (Berliner, 2009). Very preterm infants which are expected to have the most cognitive and developmental problems in school are born to Black parents 26 percent more frequently than White parents. The APGAR score (Appearance, Pulse, Grimace, Activity, and Respiration) is calculated for newborns immediately after delivery as an indication of a newborn's health and physical condition. Low APGAR scores are predictive of possible neurological damage. Such scores among Black newborns are twice as likely to be low compared to other newborns (Berliner, 2009). Preterm deliveries and low APGAR scores have been associated with poverty and insufficient prenatal care.

- **Increased illness and injury**. In 2007, 8.1 million (or 11 percent) of all U.S. children had no health insurance. This number does not include children covered by policies that require large copayments or who have only limited coverage (Berliner, 2009; Pellino, 2007). The American Association of School Administrators (2008) reported that the test scores and school attendance of uninsured children improve dramatically after they gain access to health care. There are fewer primary care physicians in low income communities, where the physician-to-population ratio is less than one third of that in middle class communities. Therefore, even disadvantaged children with health insurance are more likely to miss school for illnesses or injuries that middle class children have treated promptly (Rothstein, 2008).

  Research confirms that childhood illness and injury affect school performance because they increase absenteeism and limit students' ability to focus on learning. Children living in poverty are six times more likely to experience a wide variety of illnesses and injuries compared to children from higher income families. Many children from poor families also have undiagnosed vision problems and when they are diagnosed, follow-up care is less likely. Studies have found that even vision screening in schools has a higher failure rate in detecting problems than examinations conducted by eye care professionals; however, the poor and uninsured often can't afford those examinations. Children living in poverty are less likely to visit a dentist when they have a cavity or toothache. Among families living in poverty (under $20,000 for a family of four), 34 percent reported that their children had not seen a dentist in the last year (Berliner, 2009; Bruce, 2008; Rothstein, 2008).

  Poverty has been strongly linked to childhood injuries related to risks in the home. Low income families live in homes with fewer smoke detectors and fire extinguishers, more ungated stairs, and more unlocked cabinets and closets. Children from low income families are also in greater danger of being hit by a car due to heavier volumes of street traffic (Evans, 2004).

- **Nutritional problems.** Poor diets, hunger, and related nutritional problems have adverse effects on student achievement. Food insecurity (or difficulty providing enough food for all family members) has been reported in more than 10 percent of U.S. households, affecting about 13 million homes. Rates of food insecurity were found to be 3.4 times higher in households with incomes below the official poverty line. To combat the negative effects of nutritional deficits on test scores, some high poverty schools calorie load students on test days to give them the energy they need to perform well. Studies have reported test score gains of between four and seven points when schools provide their students with extra food on test days (Barton & Coley, 2009; Berliner, 2009; Bruce, 2008; Rothstein, 2008).

- **Exposure to pollutants.** Poor children are more likely to live in homes with lower air and water quality. Residing close to landfills or waste treatment, storage, and disposal facilities increases the chances that children will be exposed to dangerous industrial chemicals. Lead is another major pollutant that can cause neurological damage in young children. Deteriorated lead paint

and elevated levels of lead-contaminated house dust are found in approximately 4.5 million U.S. homes with young children and experts have estimated that there are about half a million lead-poisoned children in the U.S. Exposure to pesticides has also been strongly linked to income. In addition, many low income children live near major highways and are exposed to diesel exhaust fumes as trucks drive to and from industrial and commercial sites (Barton & Coley, 2009; Berliner, 2009; Rothstein, 2008; Evans, 2004).

- **Hazardous neighborhoods.** Many low income neighborhoods are characterized by social disorganization (crime, unemployed adults, and neighbors who don't monitor the behavior of adolescents) and fewer resources for childhood development (such as playgrounds, child care centers, health care facilities, and parks) (Berliner, 2009; Rothstein, 2008; Balfanz, 2006; Evans, 2004; Brooks-Gunn & Duncan, 1997).

  The basic infrastructure of low-income neighborhoods is often lacking, with substandard housing, abandoned lots and buildings, and inadequate municipal services, such as garbage collection and police and fire protection. These neighborhoods tend to have fewer retail facilities, such as supermarkets. Moreland and associates (2002) reported that low income neighborhoods have one-third as many supermarkets, but triple the number of bars and taverns as middle and upper income neighborhoods. Access to supermarkets has been linked to healthier dietary intake (Evans, 2004).

  In addition, more affluent role models are missing in low income neighborhoods. Children are less likely to be exposed to college-educated adults with professional careers (Berliner, 2009; Rothstein, 2008; Nelson, 2006; Evans, 2004).

- **Struggle to survive.** Poor children may not focus on academics because they are just struggling to survive (Pellino, 2007; Butler, 2006; Evans, 2004). A study of eight middle schools in three impoverished Midwest communities found that 99 percent of students, residents, and community leaders rated "family safety" or "staying alive" as residents' primary concern (Pena, 1998).

- **Family violence.** Children living in poverty are exposed to more incidents of family disruption and violence. Children who have been exposed to violence often display social and emotional problems, such as higher rates of aggressive behavior, depression, and anxiety (Evans, 2004). In addition, parenting styles in disadvantaged homes tend to be harsher and more punitive (Pellino, 2007; Evans, 2004).

- **Lack of adult attention.** Parent availability as a role model or participant in their children's education is often limited in low income households. Parents may work two jobs, forcing children into parental roles with younger siblings (Rothstein, 2008; Pellino, 2007; Butler, 2006; Nelson, 2006). Lee and Burkam (2002) analyzed data from the U.S. Department of Education's Early Childhood Longitudinal Study, Kindergarten Cohort (ECLS-K), a representative sample of more than 16,000 five and six year old children nationwide. They found that children from families with the lowest incomes were more likely to live with only one parent than children from the highest income families (48 percent versus 10 percent). Hampden-Thompson and Johnston's (2006) analysis of test scores from administrations of the Program for International Student Assessment (PISA) found that students in the U.S. who lived in two-parent households received higher math literacy scores, on average, than students who lived with only one parent.

- **Residential instability.** Families struggling economically may move frequently, resulting in irregular attendance at school, little or no continuity of instruction, and children's need to repeatedly adjust to new school environments. Highly mobile students often come to school with no records from their previous schools and it may be difficult for schools to access their records. Schools are challenged with placing children in the appropriate classrooms and providing them with the needed

services (Rothstein, 2008; Pellino, 2007; Butler, 2006; Nelson, 2006). The National Center for Children in Poverty reported that 18 percent of children in low income families (5.1 million) moved in 2007, compared to 8 percent of children in middle and higher income families (3.5 million) (Douglas-Hall & Chau, 2008). According to Berliner (2009), 30 percent of the nation's poorest children have attended at least three different schools by third grade.

- **Lack of educational activities and materials.** Low income children experience substantially less cognitive stimulation and enrichment in comparison to more affluent children. Many disadvantaged homes do not have the resources (such as books and educational toys) or offer the experiences (including educational interactions with parents) that provide a foundation for learning (Bruce, 2008; Rothstein, 2008; Pellino, 2007; Butler, 2006; Hampden-Thompson & Johnston, 2006; Evans, 2004).

  A recent study found that almost half of families with young children receiving public assistance had no alphabet books in the home, compared with only 3 percent of professional families (Barton & Coley, 2009). Lee and Burkam (2002) analyzed data from the U.S. Department of Education's Early Childhood Longitudinal Study, Kindergarten Cohort (ECLS-K), a representative sample of over 16,000 five and six year old children nationwide. They compared families who fell in the lowest and highest fifths of socioeconomic status. The most disadvantaged students:

  - owned 38 books, compared to 108 books owned by the top fifth;
  - were read to less often (63 percent were read to three or more times a week, compared to 94 percent of high income students);
  - were less likely to have a computer in the home (20 percent versus 85 percent); and
  - spent more hours per week watching television (18 hours versus 11 hours).

  The Federal Interagency Forum on Child and Family Statistics (2000) reported that 38 percent of low income U.S. parents read to their 3-5 year old children daily, compared to 58 percent of higher income parents. Twenty-two percent of low income parents reported taking their children to the library at least once in the previous month, compared to 40 percent of higher income parents. Becker (2000) found that not only were disadvantaged children less likely to have access to a home computer or the Internet, but those who did have computers had poorer quality hardware and tended to use them in less educational ways (for example, playing games versus word processing).

  Research has also confirmed that low income parents speak less often and in less sophisticated ways to their children. Studies have shown that middle class parents speak with their children in ways that build confidence, reasoning, and negotiating skills, while low income parents tend to give orders to their children (Berliner, 2009; Rothstein, 2008; Nelson, 2006; Evans, 2004).

  Poor children are not exposed to the same types of activities as children at other income levels. They have fewer visits to museums and zoos, fewer music or dance lessons, and lower levels of participation in organized sports leagues, all of which have been found to promote the development of cultural awareness, ambition, and self-confidence (Rothstein, 2008; Pellino, 2007).

Family and Neighborhood Conditions

Since the Coleman Report in the mid 1960s, *Equality of Educational Opportunity*, researchers have agreed that student achievement is very dependent upon the family. Recognizing this fact, the Educational Testing Service (ETS) has published two reports under the title *The Family: America's Smallest School (Barton & Coley, 1992 and 2007)*. The message in both reports was that the family is the first and smallest school where considerable development and learning takes place before a child even begins formal education.

Unfortunately, the important role parents and communities play is frequently excluded from school reform efforts. The time period before and after school is influenced by family and the community. Considering children are in school for approximately seven hours per day or a total of 35 hours per week, they remain outside of school under the influence of parents and the community for about three-quarters of their time.

The extent of the problem is illustrated by a recent UNICEF (2007) report cited by ETS regarding the well-being of children from 21 of the world's most economically advanced countries. This report ranked the United states in the bottom third on five of the six dimensions examined. The U.S. ranked 12th in educational well-being, 20th in family and peer relationships, and 21st in child safety and health.

Comparing the state of children from the time of their first report until 2007, ETS claimed there had been minimal improvement. ETS wrote, "not much seems to have changed with respect to the importance public policy gives to the family's role in children's learning…" The organization called for local, state, and federal policy reform that goes beyond the classroom and to "take whatever steps are necessary to assure the homes of all our nation's students can provide the critical support children need to achieve."

President Barack Obama alluded to a factor affecting many American families during a Father's Day speech in 2008 (Barton & Coley, 2010). He said, "We need families to raise children. We need fathers to realize that responsibility does not end at conception." Such a statement capitalizes on the long held believe that a "nuclear family" has been emphasized as the basic building block necessary for the developing child. Such a family has been historically composed of the father, the mother and child. However, the number of single-parent families has increased rapidly. Two-parent families accounted for 68 percent of all families in 2007 which constituted a 9 percentage point decrease from 77 percent in 1980. In fact, it was reported that only 35 percent of Black children live with two parents. The U.S. generally ranks the highest and Japan the lowest in the proportion of single-parent families in selected international comparisons. As mentioned in the previous section, such families generally have less income and lack both personal and monetary resources that two-parent families can provide to young children.

Barton and Coley (2010) provided a list of adverse effects of low income that can result from fatherless families. These effects included:

- Less academic success
- Behavioral and psychological problems
- Substance abuse and trouble with the law
- Sexual relations at an early age
- Less economic well-being as adults
- Less physical and psychological well-being

The prevalence of neighborhood poverty was studied by Sharkey (2009) who concluded that, "Only a very small percentage of White children live in high poverty neighborhoods throughout childhood, while the majority of Black children do, a pattern that has not changed in 30 years." In fact, this author found that 62 percent of Black children born in 1985 to 2000 were raised in neighborhoods with a poverty rate of at least 20 percent. This compared to just 4 percent of White children. Sharkey concluded:

> "Neighborhood poverty alone accounts for more of the mobility gap than do effects of parental education, occupation, labor force participation, and a range of other family characteristics combined."

Literacy Development

Literacy development begins far before a child starts school and it is very important for later academic success. ETS reported that there are considerable differences in the measured abilities of children as they start kindergarten. Mathematics scores are 21 percent and 19 percent lower, respectively, for Black and Hispanic children when compared to those of White children. In addition, the average 4-year old from a family characterized by high socioeconomic status (SES) has heard approximately 20 million more words than the child from the average working-class family and 35 million more than a child from a family receiving welfare (Barton & Coley, 2007). Additionally, 62 percent of kindergarten children from high SES families are read to every day by their parents compared to 36 percent for the lowest SES group. Exposure to verbal stimulation has been shown to influence early reading ability and subsequent school success.

High-quality child care is very important when both parents work. Approximately 50 percent of the nation's two-year olds are in some kind of non-parental child care. Barton & Coley (2007) reported that 24 percent of U.S. children were in "center-based care" rated as high quality, 66 percent were in "medium-quality" center-based care, and 9 percent were in "low-quality" center-based care. More than half of Black, Hispanic, and poor two-year olds were in child care rated as "low-quality home-based care." It was concluded that such care does not provide the level of cognitive stimulation required for optimal development during the early childhood years.

Therefore, family characteristics and home environment are very important to subsequent school success. Minority and poor children begin their educational careers behind other children, establishing a gap early in life before entering school. This gap persists and is very difficult to overcome as children progress from kindergarten through grade 12. Significant decreases in the achievement gap will only be realized when the inequities which begin before formal education are addressed.

Parenting Behaviors that Promote Learning

The following presents material taken directly from an as yet unpublished Information Capsule prepared by Research Services entitled, "Parenting Behaviors That Promote High Levels of Academic Achievement" (Blazer & Romanik, 2010). This report examined the practices of ethnic/racial minority groups that have managed to overcome a multitude of obstacles and whose children have achieved an almost unparalleled degree of academic success. This information is particularly important to parents since it illustrates the role parents play in supporting their children's learning in school.

Parents serve as powerful role models for many aspects of their children's behavior including those associated with success in school. For example, Asian American students experience the same American education as their Black, White, and Hispanic peers, but they tend to outperform students in other ethnic groups. Asian American students, on average, have higher standardized mathematics and science test scores, higher grade point averages, and high school graduation rates than students in all other ethnic groups. They are also more likely to pursue higher education and receive advanced degrees. Once they finish their schooling, Asian American's median income is the highest among all ethnic groups (Le, 2009; Uy, 2009; Kim-Hall, 2008; Maxwell, 2007; Nickerson & Kritsonis, 2006; University of California, 2005; Louie, 2004; Chao & Tseng, 2002; Sijuwade, 2001).

For years, researchers have tried to determine the factors that explain Asian American students' academic success. Although there is considerable agreement that the ethnic differences in academic performance are genuine, there is less consensus about the reasons for these differences. Researchers have divided possible explanations into four categories: genetic factors; demographic factors; cultural factors; and behavioral factors.

No empirical support has been found for the theory that genetics or demographic characteristics, such as family income and parental education levels, play a significant role in Asian American students' outstanding academic performance. Based on a review of the literature, it appears that cultural factors may partially explain Asian American students' high levels of academic performance. Asian American parents believe that education is the only way their children can achieve financial and social success and many Asian American students feel a strong sense of obligation to their immigrant parents that motivates them to work exceedingly hard in school.

For example, most experts have concluded that Asian American parents' behavioral practices play the most important role in their children's academic success. These practices include managing and structuring children's time outside of school; incorporating learning into all activities; focusing on results, not just efforts; taking responsibility for children's successes and failures; respecting educators; and emphasizing education over popularity. Most notably, Asian American parents' role as educators in the home has a significant impact on their children's levels of academic achievement. Researchers have found that when they control for learning programs in the home, the differences in achievement between Asian American students and students from other ethnic groups are largely reduced. It appears, therefore, that parents' implementation of strong home learning programs could reduce the achievement gap between ethnic groups.

A number of behaviors typifying Asian parent-child interactions are not new, but rather are the same behaviors emphasized in the majority of families achieving success in school, independent of racial/ethnic origin. The attitudes of hard work, discipline, importance of education, and respect for teachers are generally thought to be universal in families that develop successful students. These are the same "old school values" emphasized in some American families for decades. The extent to which these pro-educational values are emphasized in today's American families may be an issue worth pursuing given their prominence in Asian families whose children have achieved unparalleled academic success.

Finally, the reader should be aware of an unintended consequence of Asian American students' academic success. Some researchers have suggested that the intense academic pressure many Asian American students feel contributes to their higher rates of psychological and social difficulties, including depression, suicidal risk, and anxiety, compared to students from other ethnic groups (Cheah et al., 2009; Jose & Huntsinger, 2005; Vongs, 2005; Louie, 2001). Kuhn (2006) concluded: "And so, while applauding the impressive record of Asians' academic accomplishment, and the work ethic that underlies it, let us be wary of adopting any simple, one-ingredient recipe for success, pressing our children to bring home those grades of A and A-plus."

Recommendations

A number of authors have provided recommendations relative to improving educational equity in our schools. The section that follows lists the most prominent of these suggestions. However, the concluding remarks from the ETS report, *The Black-White Achievement Gap: When Progress Stops* (Barton & Coley, 2010) are most fitting to begin a discussion concerning this topic.

> "It is often the case that readers of a report like this will ask the authors for recommendations. This report has established that the problem facing the nation and the Black community is formidable. The insight and creativity required to frame effective solutions also is formidable and will require the involvement of government at all levels, reaching from the communities and towns to the federal government, the school systems, the nonprofit sector, the private sector, the foundations, and families. Such large-scale thinking and action will have to involve a lot of people, a lot of thinking, and a lot of resources. *This will not happen unless there is first widespread*

> *understanding of the nature and magnitude of the problem, and a considerable degree of consensus about it*. Understanding will have to occur in the nation as a whole and the Black community itself. Solutions will have to be crafted with the involvement of that community, for that community, often by the community ... and not without it. Reversing these trends will occur only when there is culmination of communication, discussion, debate, disagreements, and the development of political and national will. The trends will not be reversed by single or simple solutions (P. 37)."

ETS, in their report*, The Family: America's Smallest School* (Barton & Coley, 2010), made the following recommendations.

- Presidents, governors, and state school officials should use their influence to change parental behaviors, craft legislation, and develop programs which will intervene very early in children's lives.

- Elected officials at all levels should work with local institutions and community leaders to provide services to families to compensate for their limited resources.

- Improve the training of child care providers.

- School systems should collaborate with community agencies to provide health care for children in areas that interfere with learning.

- Establish community, state, and national programs to enhance the home and family conditions that will give all children an adequate preparation to begin school.

Ludwig and Sawhill (2007) in their report*, Success by Ten*, make the following recommendations.

- Intervene early, often, and effectively since America's social policies try to catch up to children's early disadvantages but most disadvantaged children never do catch up.

- Gear public policy toward prevention rather than remediation since in many cases the intervention is too late.

- Expand and intensify Head Start and Early Head Start programs.

The following recommendations are taken from *Poverty and Potential: Out-of-School Factors and School Success* (Berliner, 2009).

- Reduce the rate of low birth weight children among African Americans,
- Reduce drug and alcohol abuse,
- Reduce pollutants in our cities and move people away from toxic sites,
- Provide universal and free medical care for all citizens,
- Insure that no one suffers from food insecurity,
- Reduce the rates of family violence in low-income households,
- Improve mental health services among the poor,
- More equitably distribute low-income housing throughout communities,
- Reduce both the mobility and absenteeism rates of children,
- Provide high-quality preschools for all children, and
- Provide summer programs for the poor to reduce summer losses in their academic achievement.

Reforms particularly relevant to high poverty schools were provided in Blazer and Romanik (2009).

- Socioeconomic integration to reduce economic disparities between schools.
- Cultural congruence with instruction so students can relate what they're learning to their own knowledge and experience.
- Greater availability of advanced course work and career education.
- Smaller schools and classrooms that provide students with personalized learning environments.
- Financial incentives that encourage highly qualified teachers to work in high poverty schools.
- Awareness of the culture of poverty and sensitivity to the needs of children in poverty.
- District wide and school-specific efforts to reduce student mobility.
- Activities designed to involve parents in their children's education and help them create home environments conducive to learning.
- Preschool programs that provide academic and nutritional enrichment.
- Out-of-school programs, including after-school, weekend, and summer programs to increase students' instructional time.
- Extended school hours, providing children and families with access to schools during early morning or evening hours.
- Coordination with community agencies for the delivery of health, welfare, social, and recreational resources and services.
- School-based health centers that provide students with basic medical and mental health services.
- Nutritional programs that ensure students have access to breakfast, lunch, and nutritious snacks.

Conclusions

In conclusion, it goes without saying that improvements should be made in public schools; however, it is also clear that schools are not the sole problem. Public schools are mirrors reflecting the socio-cultural, economic, and political problems existing in the neighborhoods and communities in which they are located. Schools do not cause the achievement gap. The gap between high and low income children exists far before formal education begins. Schools are forced to play catch-up and generally diminish the inequalities produced by the out-of-school factors discussed in this Information Capsule. Unfortunately, long standing generational inequalities are not easily remedied or eliminated.

By virtue of the information reviewed in this Information Capsule, it is safe to assume that the NCLB mandate that all schools eliminate the achievement gap by 2014 will not be met. As David Berliner (2009) has said, "…in the real world outputs have relationships to inputs that cannot be denied…schools are told to fix problems that they never have been able to fix and that largely lie outside their zone of influence." Therefore, schools should be held accountable only for those factors over which they exert direct control.

Some might say schools have served as scapegoats on which to place blame for unsuccessful, failed or the lack of badly needed but nonexistent public policies. It is the responsibility of local, state, and national authorities to remedy the myriad of social inequities that negatively affect learning. Only then can schools be held responsible for producing equal outcomes for various groups of students. The continuation of the old stale logic that schools are solely at fault can be construed as an effort to sweep under the rug what might be considered the "elephant in the room" or the main problems confronting the country relative to educational equity, residential segregation in our communities and inequitable distribution of wealth. These long-standing societal issues are certainly outside the realm of the public schools but nonetheless must be addressed if schools are to prosper in the future.

All reports distributed by Research Services can be accessed at http://drs.dadeschools.net.

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