A New Optimism for Zip Code and Destiny: Promises and Limitations of Middle School Reform in Areas of Concentrated Poverty

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I. Motivation and Introduction

Motivation: Shepherd Alliance Internship

Each day of my Shepherd Internship that I drove down Chester Road from the suburban, college-town, Swarthmore, PA, to five square miles of concentrated urban poverty in Chester, PA, I would wonder to myself, how are the educational opportunities and life outcomes so unequal between communities just five miles away from one another?

The young people of Chester continue to be at a distinct disadvantage due to failing social, economic, and educational systems. During that summer, I reflected on my experience with Chester, writing: “It’s pretty depressing to drive around this area the TAP students call home. The kids have so much sparkle, drive and personality, but the city’s appearance is representative of the hopelessness, distress and struggles of many of its residents…I’m constantly inspired by the fact that despite this overwhelmingly and undeniably destitute environment, these students still have goals and ambitions and they still laugh all the time—but it is heartbreaking to think that one day, their parents or the emotionless, colorless people sitting on the stoops and walking along the roads might have had goals and smiles, but the harsh realities of life in Chester robbed them of their optimism.”

As I got to know the students and the neighborhood better, it became increasingly clear that the opportunity gap between young people living in Chester and peers living in surrounding communities is shockingly wide. Census data indicates that in 2009, 31.2 percent of kids aged 5-17 were living in poverty in Chester, while only 4.2 percent of children lived in poverty in Swarthmore, and Pennsylvania had a state average of 13.8 percent. Moreover, 89 percent of the students in the Chester-Upland School District (CUSD) are classified as “economically disadvantaged,” compared to 38 percent in

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1 Havens, Kalli. Shepherd Alliance Journal Entry. 25 July 2011.
Pennsylvania as a whole, and less than one percent in the neighboring Wallingford-Swarthmore School District. Poverty, and the challenges that it brings, is an enduring obstacle for the youth of Chester.

**Introduction**

A child’s zip code should never have to determine his or her destiny. But today, all too often we see that a child’s zip code has more to do with his or her life outcomes than does his or her talents, ambitions or desire to achieve. Each day, the 16 million children growing up in poverty in the United States face additional obstacles to find success in school, and are at a higher risk for a number of adverse educational and life outcomes. Something can be done, and something ought to be done.

The current research and literature about educational disadvantage reveal that there are many differing views about which strategies or interventions are the most promising for improving the life outcomes of low-income children. However, there is a consensus about the grave importance of improving academic achievement and educational attainment. In this paper, I question, to what extent can schools (school reform) mitigate the achievement gap and improve both the educational and life outcomes of students living in high poverty communities? I consider this question in the context of the number of challenges disadvantaged students face outside of school. These challenges affect both cognitive and non-cognitive development and achievement. There is a tremendous amount of enthusiasm surrounding the success of a number of school reform efforts to be able to increase achievement among the most disadvantaged

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students. However, this paper argues that there is no silver bullet for school reform, and school reform needs to account for the various circumstances of the population it serves. In areas of high-concentrated poverty, schools need to be equipped with effective educators that have the capacity to influence cognitive and non-cognitive gains in their students, in spite of the additional challenges these students face. In order to recruit high quality individuals to teach, it will be important to provide financial incentives, allow for alternative pathways into the profession, as Teach for America does, and improve working conditions. Other promising reforms aimed at instructional and curricular changes could be implemented to support the teacher and further enhance his or her teaching abilities.

This paper begins with the meaning and trends concerning educational disadvantage and high-poverty schools. I then provide an explanation for some of the factors—both external and internal to schools—that contribute to formation and persistence of the learning and developmental gap. Although an extensive amount of literature praises early childhood intervention as the most promising way to improve educational opportunities and life outcomes of poor children, this paper focuses on the need to provide children with an excellent education at all stages of their public school career. Research has shown that middle school—6th through 8th grade—is a crucial time in determining a child’s future successes. Intervention, high quality instruction and an overall positive school experience can have a huge impact on a student at this stage. The second half of the paper identifies and explains school reform efforts that are most promising for middle school students in high poverty communities, and provides moral and economic justifications for these reforms.

II. Identifying the Gaps

What is Educational Disadvantage? What Gaps Exist?
According to Harry Brighouse and Gina Schouten, “educational disadvantage refers to the way that some children are put at a disadvantage relative to others in their ability to negotiate the adult world by how they interact with whatever educational institutions are available to them.”

Currently, we do not have precise measures of the skills and traits educational institutions can produce, nor do we know exactly which skills and traits are particularly influential. Brighouse and Schouten indicate that the standard measures are:

- Attainment—the number of years a child attends school
- Graduation—whether a child graduates from high school
- Achievement—how well he or she performs on tests of narrowly defined achievement, usually reading and mathematics

Various factors influence poor performance on these measures, and thereby lead to educational disadvantage. However, indicators of performance on these measures only tell part of the story of how schools can influence students’ educational and life outcomes. Given the number of other traits that affect one’s life outcomes, “an exclusive focus on the “achievement gap” can be misleading.” Admittedly, attainment, graduation and achievement are not the only indicators of importance; however, they serve as good proxies for other outcomes of concern.

An achievement gap exists whenever one group of students achieves less, than the other groups of students, typically on a test measuring proficiency, and the difference in scores is not due to innate differences. Achievement gaps are often observed between students in different demographic groups—gender, race, and income level. In a nation that boasts equality of opportunity, and promotes education as the great equalizer, research has demonstrated that the

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7 Ibid.
8 Ibid.
achievement gap among students of different income levels is quite severe.\textsuperscript{9} Sean Reardon, a sociologist specializing in education, analyzes the declining correlations between race and educational achievement, and contributes to the literature on educational disadvantage with his analysis of the larger and growing correlation between family income and educational achievement.\textsuperscript{10} Reardon shows that within 50 years, the income-based gap in test scores between low-income and their better off peers has doubled.\textsuperscript{11} This growth in the income-based gap in children’s reading and mathematics achievement has in turn resulted in a larger gap in the educational attainment between children growing up in poor families and their better-off peers.\textsuperscript{12} Rising income inequality has contributed to rising residential segregation by income. This trend suggests that diverging educational outcomes by income may have to do with the increasing numbers of children who are growing up in neighborhoods characterized by concentrated poverty or concentrated affluence.\textsuperscript{13}

Today, the National Assessment of Educational progress, known as the “Nation’s Report Card,” is one of the most used sources to document differences in academic performance among various groups in the United States. Reardon claims that the socioeconomic status (SES) of a child’s parents has always been one of the strongest predictors of the child’s academic achievement and educational attainment.\textsuperscript{14} Students in the bottom quintile of family socioeconomic status (SES) score more than a standard deviation below those in the top quintile


\textsuperscript{10} Reardon

\textsuperscript{11} Reardon, 100.

\textsuperscript{12} Reardon, 93.


\textsuperscript{14} Reardon, 92.
on standardized tests in reading and math when they enter kindergarten; these differences do not seem to narrow as children progress through school.

The opportunity gaps between the two neighborhoods can be illustrated by the enormous differences in demographics, achievement, attainment and teachers as seen on the “Report Card.” The educational performance gap between Chester students and their peers in Swarthmore is revealed in multiple measures encompassing achievement and attainment. Student results from the Pennsylvania System of School Assessment (PSSA) illustrate a test score gap between the districts persists throughout K-12. As the focus of this paper is on middle school, it is important to comprehend those numbers. In sixth grade, 40 percent of students from Chester are proficient or above in mathematics, and only 26 percent tested proficient or above in reading.\textsuperscript{15} The same year, 22 percent of Chester’s eighth graders tested proficient or above in mathematics, and 29 percent were at or above the proficiency threshold for reading.\textsuperscript{16} In stark contrast, in Swarthmore, 94 percent of sixth graders are at or above the proficiency threshold in mathematics, and 90 percent are proficient or above in reading; these rates remain essentially the same each year of middle school.\textsuperscript{17} Although the Wallingford-Swarthmore district received its first warning for continuing to make Adequate Yearly Progress (AYP),\textsuperscript{18} in 2012 the Chester Upland School District had a ‘Corrective Action II 10\textsuperscript{th} Year’ AYP status after failing to achieve any reading benchmarks, and only one of fourteen mathematics benchmarks, and as a result of chronic low student achievement for twelve consecutive years.\textsuperscript{19} Each year, based on the previous three years of student academic performance on the reading, writing, math and science

\textsuperscript{15} Pennsylvania Department of Education
\textsuperscript{16} Pennsylvania Department of Education
\textsuperscript{17} Pennsylvania Department of Education
\textsuperscript{18} This indicates that as Wallingford-Swarthmore continues to meet its benchmarks, looking at its future trajectory, the district is warned that it may not continue to make necessary gains each year (Pennsylvania Department of Education).
\textsuperscript{19} Pennsylvania Department of Education
PSSAs, the Pittsburg Business Times ranks the 498 Pennsylvania school districts. The recently released 2013 rankings put the Wallingford-Swarthmore school district as the 11th best school district in the state, the second highest ranking public school district in Delaware County, while Chester Upland ranked 495th. These somber and persistent testing results expose the abysmal failure of the Chester-Upland School District to overcome the neighborhood and familial factors that impede the educational development of some of the most vulnerable and at-risk youth in the United States.

Chester lags behind its neighbor in terms of educational attainment as well. While the Wallingford-Swarthmore district boasted a 97 percent graduation rate in 2011, the same report shows that Chester has a 42 percent graduation rate, which falls short of the state’s 83 percent. Such low graduation rates diminish the premise of equality of opportunity, and contribute to the sustained lack of economic and social mobility characteristic of these communities. Research has demonstrated that patterns of behavior and achievement during a child’s middle school years can be highly predictive of him or her dropping out of high school, and thus it is reasonable to support policies that identify middle school students at risk of dropping out, and focus on providing them with additional educational and nurturing support services to keep them on track and prepared for high school.

**High-Poverty Areas and Schools**

Problems of academic and non-cognitive learning are pervasive in high-poverty schools, and as such these schools have observable achievement and behavioral gaps. The percentage

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21 Radnor Township School District of Delaware County ranked 4th statewide (Lott).

22 Lott

23 Pennsylvania Department of Education

24 Defined as schools with more than 75 percent of students eligible for free or reduced-price lunches
of high poverty schools in the United States has grown from 12 percent a decade ago to 17 percent of schools in 2011.\textsuperscript{25} These schools are most commonly located in central cities, and they typically are populated by a high percentage of minority, African American or Latino, youth.\textsuperscript{26} Lagging academic achievement is one of the most evident problems in high-poverty schools. Beyond the evidence of Chester’s trailing achievement scores, education expert Brian Rowan indicates that by the time students ender ninth grade in high-poverty schools, “around 80 percent are over-age for their grade or have reading and math skills that are below seventh grade level.”\textsuperscript{27} This poor achievement often raises frustrations with school, many students are inadequately prepared for high school, fail their classes, have to repeat, and 40 to 60 percent ultimately drop out.\textsuperscript{28} Inadequate levels of achievement and high dropout rates result in sanctions under today’s accountability movement, and high-poverty schools are often labeled as “dropout factories.”\textsuperscript{29} A study conducted by the Center for Social Organization of Johns Hopkins University described Chester High School as a “dropout factory.”\textsuperscript{30}

In addition to lower achievement and attainment, high-poverty schools face problems such as lack of engagement, as well as the number of problems that flood into the school from the surrounding environment. In high-poverty schools, rates of student absenteeism are higher, students report more disciplinary problems, parents are less likely to participate as volunteers or attend school events, students are less likely to participate in sports or extracurricular activities, students do less homework, crime rates are higher, students and teachers are more likely to feel unsafe, “more students engage in risky behaviors such as substance abuse and sexual activity,

\begin{itemize}
\item \textsuperscript{25} Rowan, 523.
\item \textsuperscript{26} Rowan points out that 34 percent of all children attending high-poverty schools are black, 46 are Hispanic and 25 percent have limited English proficiency.
\item \textsuperscript{27} Rowan, 524.
\item \textsuperscript{28} Ibid.
\item \textsuperscript{29} Ibid.
\item \textsuperscript{30} Dropout factory” high schools fail to graduate 60% of students who enter as freshmen.
\item \textsuperscript{31} “Chester dropout rate too high,” \textit{Delaware County Daily Times}, Sunday, November 4, 2007.
\end{itemize}
and more have mental health problems.”\textsuperscript{32} Additionally, in high-poverty schools, students experience a lot of instability due to their family’s economic circumstances, frequent moving, and higher rates of teacher mobility. Rowan illuminates the fact that despite the number of issues within high-poverty schools, they have “about the same ratios of student support personnel (nurses, psychologists, social workers, counselors) per pupil as do schools serving less disadvantaged populations.”\textsuperscript{33} By way of illustration, the Wallingford-Swarthmore school district has twelve guidance counselors for the district, while the Chester-Upland school district has a thousand more students, facing arguably more complex issues each day, and only four counselors for the entire district.\textsuperscript{34}

\textbf{III. What is responsible for student achievement gaps? Challenges that impede student learning}

Understanding why children realize such different outcomes is central to formulating effective education policy. Much of the evidence concerning what causes educational disadvantage is merely suggestive, and is often complicated by the myriad of factors that interact and compound with one another.\textsuperscript{35} Children’s cognitive and non-cognitive learning is affected by a multitude of interacting and simultaneous processes that are influenced and reinforced by important communities such as schools, households and neighborhoods. In a broad sense, poverty or family income inequality may affect access to certain settings or opportunities that

\textsuperscript{32} Rowan, 524.
\textsuperscript{33} Ibid.
\textsuperscript{34} U.S. Department of Education, National Center for Education Statistics, Data Tools: Public School District Finance Peer Search. \texttt{http://nces.ed.gov/ccd/districtsearch/district_detail.asp?ID2=4224790} Note: this does not include other support service personnel, only guidance counselors.
\textsuperscript{35} Reardon writes “the relationship between family socioeconomic status and student achievement is one of the most robust patterns in educational scholarship, but the cause and mechanisms of this relationship have been the subject of considerable disagreement and debate” (92). He points to a number of other authors for reference.
would help foster children’s cognitive skills and educational attainment.\textsuperscript{36} Income alone is not the only thing that matters, although in many cases the implications of income are that by virtue of where parents can afford to live. They may not have the capability to send their children to ‘good schools,’ or live in ‘safe neighborhoods,’ and thus the impact of family poverty on children is compounded by the characteristics of the neighborhoods they are limited to. Financial strains may also affect a parent’s ability to provide their child with a stress free environment, or to invest financially in educational resources or after school programs. Moreover, in high concentrated poverty areas, parents lack the capability to embrace education and thus the student may suffer from a lack of parental engagement, or low academic expectations that are often reinforced within the impoverished community.

The achievement gap has been extensively documented over the last fifty years. Many point to the landmark “Coleman Report,” written by sociologist James Coleman in 1966, as one of the first studies revealing the grave disparities in educational opportunities and outcomes in America. The Coleman Report implied that school inputs have a negligible effect on learning outcomes, and suggested that family background is the strongest predictor of academic achievement and educational attainment.\textsuperscript{37,38} The report famously illuminating the connection between family socioeconomic status and student achievement fueled the defeatist outlook that nothing works when it comes to improving schools for poor children, and forced family’s rather than schools to be held accountable for children’s education. Communities like Chester expose the failures and limitations of this outlook. In Chester, it is evident that family background is not


\textsuperscript{38} Students’ background explained 90 percent of their achievement in school (Coleman).
the solitary determining factor, but the student outcomes are also shaped by the neighborhoods, concentrated behaviors in the schools (‘peer effects’), and the city’s failing systems.

Although the Coleman Report fostered the pessimism about the ability of schools to improve the life chances of students, many researchers continued to evaluate school practices, and have come to realize that many school-based educational policies can improve learning outcomes and life chances for disadvantaged children. However, they still hold onto the fact that a number of other experiences and social determinants can be correlated with learning outcomes. Brighouse and Schouten explain that educational disadvantage can emerge or persist because of both internal (in-school) and external (out of school) factors. As we shall see, a mixture of problems contributes to the achievement gap, and therefore it is important for policymakers to respond to these challenges accordingly.

**External Factors**

One key external factor is “how well families prepare children to interact with school,” as childhood development plays a central to determining a child’s educational trajectory. The first five years of a child’s life are the most critical period to develop cognitive, social and emotional abilities that allow for the development of behaviors, non-cognitive and cognitive skills that contribute to academic success. Although there is much to be said about the importance of early childhood development, behavior, and education, as well as early childhood intervention, we ought not to give up on children after elementary school. Reform efforts should target middle school aged students. Regardless of whether or not a child from a low-income community

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39 Brighouse and Schouten, 510.
40 Brighouse and Schouten, 509.
41 A growing body of research demonstrates disparities in academic achievement by both race and class are apparent before children even enter kindergarten, and therefore these differences are not ‘innate,’ but are a result of the child’s environment (Ludwig and Jacobs, 270). The gaps emerging early in life can be due to a number of factors including prenatal care, parental involvement, and nutrition. This research, and the success of the high-quality Perry Preschool and Abecedarian programs along with Head Start, suggests that intervention during the earliest years of a low-income child’s life may show the most promise, and the highest returns (Ludwig and Jacobs, 270).
received quality early childhood education, or entered kindergarten on equal footing with his or her more affluent peers, students from disadvantaged communities could lose ground if they attend a low-quality mainstream public school, or learning or behavioral gaps could emerge as these students will continue to face a multitude of external challenges. In order to effectively mitigate the effects of poverty on students’ learning and life outcomes, we must focus on improving educational opportunities for low-income children at all stages of their educational career.

Beyond early childhood development, the environment in which the student lives or goes to school can also uncover a number of external features that help to explain the achievement gap. Components of educational disadvantage that are external to schools are often at the root of students’ academic or behavioral problems in school. A non-exhaustive list of factors external to schools that affect the educational success and life outcomes of students include variations in:

- Family income and wealth
- Housing conditions and stability
- Levels of neighborhood crime or exposure to violence
- Social determinants of health (including access to healthcare, public health measures, current health state, mental health, quality and safety of physical environment)
- Levels of parental and individual stress
- Labor market opportunities and parental employment
- Family structure and stability, as well as parental involvement
- Concentrations of advantage or disadvantage in neighborhood
- Neighborhood peer group
- Cultural perceptions or expectations
- Access to quality educational opportunities in the community outside of school (afterschool programs, or summer programs)\(^\text{42}\)

These factors have led to some doubt that reform at the middle school level can accomplish anything, and they provide a more recently developed context for the way middle

\(^\text{42}\) Brighouse and Schouten, 510.
school reform should advance and address these challenges. In Chester, the factors (many of which are closely tied to family income) that seemed to present the most significant challenges to student learning were poor housing conditions and instability, family instability and lack of parental involvement, high levels of neighborhood crime and exposure to violence, a lack of access to outside of school enrichment opportunities and the pervasive culture of low expectations for achievement. Students who face challenges of poor housing conditions may be faced with environmental toxins (led poisoning, or pollution that leads to asthma and causes more frequent school absences) that affect cognitive growth, or things such as crowding and noise that could affect a student’s ability to complete school assignments, or get the adequate amount of sleep. Additionally, housing instability forces both students and their parents to cope with that as an additional source of stress, which may divert the parents’ focus from the child’s academics, and frequent movement is detrimental to the student’s concentration level and achievement. In Chester, many students were living with relatives, and moved between houses frequently. This lack of stability in both housing and family can produce variation in children’s school success. If students are moving frequently between relatives, they lack consistency in role models and supervision, and the lack of consistency in parenting and discipline practices can undermine a child’s ability to establish strong values and good habits, and may adversely affect a child’s ability to function in school. Middle school students, old enough to perceive the challenges their families are facing, often bear the burden of familial stress, and as a result suffer emotionally.

Chester is a breeding ground for drug use, crime and violence. By the summer of 2010, the violence over drugs or conflicts between gangs was so bad that Chester’s mayor declared the
city in a state of emergency and implemented a 9 PM curfew for all people under the age of 18. All of the students that I worked with that summer had lost someone close to them as a result of violence, and earlier in the spring of 2011, several of the students had been present at the birthday party where two teens were killed and seven were wounded. Witnessing frequent acts of violence, or coping with grief and the loss of a loved one, may lead to post-traumatic stress disorder or biological responses to stress that can significantly interfere with learning. In areas of high concentrated poverty, cultural mechanisms may also affect student outcomes. According to the social isolation theory, inner-city neighborhoods that consider themselves as socially isolated from mainstream individuals or institutions develop a “ghetto-specific culture, which orients young people away from schooling by reinforcing norms and values that denigrate the value of education.” A similar sentiment is supported by the oppositional culture theory, which suggests that behaviors that promote academic achievement become defined as “acting white,” and thus students who value acceptance within their community more than academic achievement are more disengaged with school. Furthermore, the local environment shapes students’ perception about the community’s expectations for student performance. For example, when a student lives in a neighborhood in which many students drop out of high school, this reduces the stigma of dropping out, and thereby increases a student’s preference for doing so. A culture of low-expectations often becomes a self-fulfilling prophecy, and contributes to the cyclical nature of poverty in these distressed communities.

45 Ibid.
46 Ibid.
Despite the fact that students in impoverished neighborhoods constantly face a number of potentially harmful aspects outside school of school walls, these same neighborhoods have fewer resources and institutions that provide a safe, supervised place to hang out, or that support academic endeavors or extra-curricular activities. Students from low-income families and communities are at a disadvantage compared to more affluent peers, in that they cannot afford, or the community does not offer many quality after school or summer enrichment programs that provide enriching learning opportunities, targeted academic support (tutoring services), and can work to increase academic gains or prevent learning loss during the summer months.

**Internal Factors**

A McKinsey & Co. report states, “wide variation in performance among school systems serving similar students suggests the opportunity and output gaps can be substantially closed.”

This finding indicates that classrooms, schools and districts that have demonstrated success in improving opportunities and achievement of disadvantaged students substantiate the argument that school reform efforts are effective. School reform efforts will be most effective in reducing the wide variation in performance when educators and policymakers respond to the special circumstances students face in families and neighborhoods outside the schools that influence achievement and attainment. Jacob and Ludwig’s article show that educational school-based interventions can in fact lead to student gains, and help to narrow the gap, so we can infer that school inputs (internal factors) can be correlated with educational disadvantage as well.

Internal factors that can affect the educational success and life outcomes of students include variations in:

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49 Jacob and Ludwig, 266-290.
• School resources and spending
• Teacher quality
• Leadership style and quality
• Curriculum and school structure (ex. class size, length of school year, length of school day etc.)
• Disciplinary style
• Standardized test policies
• Accountability system
• Physical environment of school
• Peer group within school
• School support service personnel (ex. psychologist, learning specialist, school nurse etc.)

Even if all students were to realize benefits from quality preschool intervention, these benefits can be squandered if children then go on to spend time in low-quality mainstream public schools. While these in-school characteristics vary in their importance, I will expand on the most significant in high-poverty areas: low teacher quality, not enough time for intensive learning, high student to teacher ratios, and a shortage of well-trained school support service personnel.

Amartya Sen argues that people with different needs require different resources to reach the same capability. He exemplifies his argument by suggesting that someone with a kidney problem that needs dialysis treatment to function normally will need and deserve greater resources to function normally as a person without the kidney problem. In high-poverty schools, equitable treatment will require different treatment. That is to say, in order to provide children with the same educational opportunities regardless of the zip code they are raised in, a greater emphasis and more resources ought to go towards improving the in-school factors in high poverty schools.

50 Brighouse and Schouten, 510.
The source of inferior educational outcomes for children in low-income communities is not disinterested students and families. Rather, unequal outcomes stem from children growing up in low-income communities face additional challenges, and schools lack sufficient capacity to adequately address their needs. The factors outlined in this section, both internal and external, and the interaction between factors both limit and change the way school reform takes place. The fact that some schools are finding promising results for disadvantaged students contributes to a sense of optimism and a reason to move forward with school reform efforts. Although there is much we can do to take pressure off schools by improving economies in these impoverished areas, improving social services and health services and even providing high quality early childhood education, we cannot wait for these initiatives to act alone when we know middle school reform has tremendous promise to help students in disadvantaged communities fulfill their potential.

IV. Why Middle School?

Even for children growing up in the best circumstances, middle school can be a great period of uncertainty. Middle school students present schools and educators with a unique set of challenges, and middle schools are often blamed for teens’ future disengagement from school or low achievement. Growing up in poverty puts children at a disadvantage every step of the way, and the circumstances and stresses associated with poverty do not make middle school more manageable. Research depicting the process that predicts dropping out, as well as the socio-emotional issues that affect learning in the middle school years, suggests that in high-poverty areas, where students are burdened with many external stressors, a quality middle school education is an essential factor for future educational and life outcomes.
Mental health problems interfere with the educational attainment of approximately 7.2 million young Americans.\textsuperscript{52} As many mental health problems, issues of psychological distress (anxiety, depression) and conduct problems (aggression and disruptiveness), increase around the same time students are adjusting to middle school, it is important to consider the association between such problems and academic functioning during middle school.\textsuperscript{53} At the school level, the association between socio-emotional issues and academic performance is observable as the lowest-achieving middle schools have the highest rates of antisocial behavior, and the most disciplinary problems.\textsuperscript{54} This evidence suggests that at the middle school level, there is a need to address social-emotional difficulties of students as a part of the effort to improve academic achievement.

A failure to engage and support youths in middle school can have serious life-long consequences. Research has demonstrated that students at risk of dropping out can be identified as early as middle school. The decision to drop out isn’t sudden but typically a slow process of frustration and disengagement over.\textsuperscript{55} The data of this study revealing the risk factors for dropping out suggest that middle school students are highly influenced by their school experience, and thus effective reforms have potential to significantly alter their life trajectory.

\textsuperscript{53} Ibid.
\textsuperscript{54} Ibid.
\textsuperscript{55} Middle School Moment: Dropout Nation. PBS Frontline, 2012. Film. \url{http://video.pbs.org/video/2257751072/}
of high school.”\textsuperscript{56,57} In addition, grade retention in middle school can be one of the strongest predictors of dropping out.\textsuperscript{58}

Although effective early childhood intervention is important, the national focus on this movement should not crowd out the focus on improving middle school opportunities. The middle school years are a transformational time in a child’s life, and it is paramount that society focuses on keeping young teens in low-income communities on track for success, and ensures that students at risk of poor educational outcomes receive the necessary supports to achieve equality of opportunity.

V. How could improving middle schools ameliorate educational disparities?

School Reform Efforts Overview

A range of interventions has been tried in middle schools. Some have significant potential to reduce the zip-code gap. There is no single problem with our schools, and thus, sustainable school reform requires investment from all angles. Jacob and Ludwig are not the only researchers to admit, “identifying the optimal policy response to the mix of problems that plague our schools is complicated by the possibility that these problems might interact with each other.”\textsuperscript{59}

The No Child Left Behind Act (NCLB) indicates the nation’s support for setting high standards and setting measurable goals so that administrators and policymakers can track individual’s educational outcomes. While NCLB’s is seemingly well intended, it set an unrealistic goal for all students to reach scores of proficient and above by 2014, and these goals

\textsuperscript{56} Middle School Moment (http://www.pbs.org/wgbh/pages/frontline/education/dropout-nation/middle-school-moment/)
\textsuperscript{58} Juvonen et. al., 117.
\textsuperscript{59} Jacob and Ludwig, 267.
created perverse incentives for schools under pressure. It also failed to provide support for remedying the achievement deficiencies that it discovered. Nevertheless, NCLB motivated policymakers and educators to identify ways to increase student achievement and improve learning outcomes. It has incentivized schools to focus on all of their students, regardless of their level of disadvantage.\textsuperscript{60}

In the wake of the accountability movement, several reform efforts have emerged; they include class size reduction, providing early childhood education, overhauling curricular content, the school calendar and graduation requirements, promoting school choice models (charter schools, magnet schools and voucher programs) student tracking, school privatization, grade retention and school bussing, reforming teacher education and certification, teacher pay, teacher unions, school funding initiatives, changing disciplinary policies, improving school leadership, and comprehensive school reform models like the Harlem Children’s Zone (HCZ) approach. In some cases these reforms have made modest improvements for student achievement in areas of concentrated poverty, while in others, the evidence is still out.

This paper focuses on the intervention strategies that have the most promise for overcoming the familial and neighborhood challenges students in high poverty communities face, and for ultimately reducing the educational inequalities and improving student outcomes. Although many factors combine to make schools successful, highly effective teachers are the most important component to raise student achievement in disadvantaged communities. Recruiting highly effective teachers to high poverty schools ought to be the principal initiative.

The section on teachers discusses why and how teachers can be so important, as well as

\textsuperscript{60} In theory this is true, however in practice we sometimes see that setting thresholds of proficiency encourage schools and educators to focus on the “bubble” students—those who appear capable of meeting the standards, while those identified as having no chance in passing are ignored (Richmond experience). A better-suited accountability policy may measure academic gains year to year rather than just one threshold of proficiency. Further discussion of the merits and failures of the accountability movement is beyond the scope of this paper.
strategies that could be implemented to attract these teachers. Quality teachers cannot narrow
the gap alone, and focusing solely on providing children with effective teachers absent of other
changes could have deleterious effects. The following section also discusses the need for
additional reforms in areas with these special circumstances to change the larger context in
which teachers are working and to make the instruction more effective. These additional reforms
include class size reduction, extended in-school learning time, the provision of quality
afterschool and summer programs with a mentorship component, the adoption of a system to
identify ‘at risk’ students for targeted support, as well as additional well-trained support staff.

**Highly Effective Teachers**

Murnane and Steele are among many scholars that suggest that high quality, effective
teachers is one of the most urgent matters for school reform. Research demonstrates notable
variations across teachers’ ability to raise student achievement, and has suggested that students
can exhibit significant gains if highly effective teachers teach them. Some teachers are much
better than others in helping disadvantaged children acquire the essential math and reading
skills.\(^{61}\) Another consistent finding in educational literature is that disadvantaged children, the
one’s most in need of the nation’s best teachers, are the least likely to get them. Reforms aimed
to recruit the most effective teachers to schools in high poverty areas are central to improving
these schools.

Two common indicators of teacher quality are teacher experience and if they have an
advanced degree. One of today’s biggest challenges in education is “to recruit and retain
teachers who have a strong positive impact on students’ learning” and are skilled at raising

\(^{61}\)Rivkin, Steven, Eric A Hanushek and John F. Kain. “Teachers,Schools,and Academic Achievement,”
student achievement levels.\textsuperscript{62} Two of the biggest problems with providing disadvantaged students with effective teachers are the low supply and unequal distribution of these teachers.\textsuperscript{63}

The supply of quality teachers in the labor market is largely a function of salaries, opportunity costs and working conditions. The supply of teachers in the labor market has been negatively affected by increased labor market opportunities (especially for women and minorities), as the opportunity costs associated with teaching have risen. Women now have other career opportunities; the share of teachers from the top decile of their high school class, whose high academic ability acts as a proxy for teacher effectiveness, has fallen from 20 percent to 11 percent between 1964 and 2000.\textsuperscript{64}

Education is losing in the competition to compete for talented college graduates, largely because other occupations reward strong academic skills more than education. Although the increase in opportunities for alternative professions and relatively low salary affects the supply of effective teachers in all communities, high poverty schools are at a distinct disadvantage because highly effective educators lack the incentives to teach in a more challenging environment.

Evidence shows that the supply of effective teachers is not distributed equitably across U.S. schools. A 2002 study by Hamilton Lankford, Susanna Loeb and James Wyckoff found that New York State schools "serving high concentrations of poor, nonwhite, or low-achieving children were disproportionately staffed by teachers who were inexperienced, were uncertified in subjects they taught, had graduated from noncompetitive colleges, or had failed their licensing examination on the first attempt."\textsuperscript{65} This problem of unequal distribution is not confined to New


\textsuperscript{63} Many educational reformers and policymakers suggest that teacher unions are one of the biggest problems with today’s education. This topic, along with other topics of teacher reform (ex. Merit pay and teacher evaluation) are beyond the scope of this paper.

\textsuperscript{64} Murnane and Steele, 31.

\textsuperscript{65} Murnane and Steele, 29.
York, but is well supported by research on North Carolina schools and by a study on Teach for America (TFA), which found that non-TFA teachers working in socioeconomically disadvantaged schools served by TFA corps members “were far less likely than the average U.S. teacher to have attended a selective college or to have completed student teaching before becoming a teacher.”

NCLB aimed to emphasize and improve teacher quality by mandating that all teachers are ‘highly qualified.’ More than a decade after this initiative started, 20 percent of the teachers in the Chester-Upland School District do not meet the criteria for “highly-qualified,” while all teachers are highly qualified in the Swarthmore schools.

Economic studies generally agree that teacher quality matters, but there is still disagreement amongst them about what makes a high-quality teacher. As addressed earlier, characteristics and experiences that make a high-quality teacher in the Chester-Upland school district are likely very different from what can make an effective teacher in Wallingford-Swarthmore schools. Teach For America (TFA) has identified a number of personal characteristics of teachers whose disadvantaged students make the most progress and find the most academic success. These characteristics possessed by highly effective teachers in disadvantaged areas include demonstrated leadership ability, strong academic achievement, perseverance in the face of challenges, excellent critical thinking skills, ability to adapt to changing environments, and exceptional organizational ability.

In a distressed community, the school culture shaped by the educators needs to be uplifting. At the middle school level in particular, teachers and student teacher relationships can be the most critical element to a student’s success. A recent study by economist David Figlio

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66 Murnane and Steele, 29.
67 PA DOE
suggests that teacher expectations affect academic achievement. Lower expectations for children from more disadvantaged families, regardless of their ability, may become a self-fulfilling prophecy, causing children to become more disengaged and alienated from school. Teach For America corps members almost universally report “teachers’ own expectations have a much more powerful effect on achievement than any other variable.” Expectations are key during the middle school years when a lack of motivation and low self-esteem can raise the psychological costs to learning.

**Strategies to Recruit Highly Effective Teachers**

There are a number of policy responses that have been proposed to increase the supply of effective teachers, and to distribute them throughout schools more equitably. An important part of the school reform effort in high poverty areas is to develop and implement practices that make schools attractive and supportive places for teachers to work and reinforce effective teaching methods. Most policy responses address the issues of pay, working conditions, and barriers to entry.

**Financial Incentives**

Salary increases, bonuses or loan forgiveness reduce the opportunity cost of teaching. Evidence from California suggests that offering academically talented teaching candidates $20,000 bonuses to work in low-performing schools resulted in a significant increase in the rate at which teachers started working at these disadvantaged schools.

**Alternative Pathways to Profession**

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71 Jacob and Ludwig, 273.
Many highly skilled individuals interested in teaching, particularly those who may have realized their interest late in their college career, or those with the best alternative labor market options, may be prevented from teaching because of the traditional certification requirements. Another popular approach to increase the number of people willing and able to teach is to develop alternative pathways into teaching. There is evidence that teachers who enter the teaching profession through competitive alternative licensure programs, such as Teach for America, are just as effective as those who enter teaching through traditional routes.  

Additionally, programs like Teach For America incentivize individuals to teach in low-performing schools because TFA provides its own support services to help new teachers deal with all of the challenges that come with being a new teacher in a disadvantaged community. Additionally, TFA entices students with its own opportunities for professional development.

**Working Conditions**

One’s decision to teach will also depend on working conditions. Working conditions include features such as parent support and involvement, physical school quality, school safety, opportunities for professional development and quality of school leadership. Additionally, working conditions include the extent to which the teacher feels supported in his or her environment. The idea of improving working conditions can partner with financial incentives in that offering compensating wage differentials only makes sense if it is “accompanied by the resources needed to educate well the children in these schools.”

We turn now to initiatives that can help teachers improve education in high-poverty schools.

**Strategies to Enhance Teacher Effectiveness**

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73 Murnane and Steele, 20.

74 Murnane and Steele, 20.
A number of promising reform strategies could work to enhance the effectiveness of teachers in schools serving poorer students. Some advocate for curricular and instructional changes such as smaller class sizes or longer school days or years. Other promising strategies include the provision of additional services such as afterschool or summer programs, more frequent and higher quality school counseling.

**Class Size Reduction**

A reduction in average class size may be effective in that it allows teachers to spend more time working with individual students, to get to know students better, and to cater to students’ specific needs. With a smaller class, teachers are also better equipped to manage and monitor student behavior. The Tennessee Project STAR produces the strongest evidence in favor of class size reduction, and shows these gains to be larger for more disadvantaged or minority students.  

Students in smaller classes performed better on standardized tests, and were more likely to take a college entrance exam (SAT or ACT) many years later. Another study found that a reduction in the pupil-teacher ratio of 10 students increased average lifetime earnings by 4.2 percent. Although this study was conducted on younger (K-3) children, the implications may be important for middle school learning as well. Researchers who compared a high-poverty and low-poverty school district confirmed the results of these studies, finding that as class size increases by one student in a high-poverty school, standardized reading scores decline on average. In order for the teacher to effectively overcome the external issues that complicate learning in high poverty schools, he must have the capacity to build and foster strong relationships with students.

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76 Rouse and Barrow, 114.
77 Ibid.
More Extensive Program of Learning: In School and Out of School

A longer school day or longer school year is a promising reform effort in that it increases the amount of time students spend learning. This is especially promising in areas of concentrated poverty because increasing time spent in school means decreasing the amount of time students are exposed to adverse external factors. Secretary of Education, Arne Duncan, states “I think the school day is too short, the school week is too short, the school year is too short…You look at all the creative schools that are getting dramatically better results. The common denominator of all of them is they’re spending more time.”

While many of these ‘creative schools,’ have demonstrated improved academic achievement, there is still debate as to whether or not this is due to having an extended school year or school day. However, in the context of high poverty schools and communities, it is important to consider the fact that a longer school day or school year means teachers will have more instruction time, can spend more time on material, and can enhance their relationships with students. In high poverty schools, it may be necessary for students to have more learning time than students in more affluent neighborhoods, because given the community’s special circumstances, more time may be required to overcome those obstacles to learning.

Across the nation, after school and summer programs produce solid outcomes. In high-poverty areas like Chester, these programs are especially influential because they can help to reinforce school learning, to mitigate summer learning loss, and to provide the students with enrichment opportunities that keep them focused on and engaged with learning. Moreover, adolescents in high-poverty and high-crime neighborhoods need such opportunities “not only for

79 Ibid.
80 Ibid, 405-406.
what they provide but what they prevent.”81 In disadvantaged communities, programs dedicated to enhancing the soft skills or social awareness of students contributes to cognitive and non-cognitive gains.82

Programs with a strong mentorship component are needed for disadvantaged middle school students. Research shows that mentoring has significant positive effects on early indicators of low achievement and dropping out such as school engagement, absenteeism and behavior problems.83 In high poverty areas mentorship also has tremendous potential because students lack role models to help keep them on track and set high expectations. In the middle school years, mentorship is especially influential as students navigate the hardships of their neighborhood, and establish their goals and values.

Identification System

Schools should identify at-risk students during the middle school years. Robert Balfanz, a leading education researcher and Co-Director of the Everyone Graduates Center at Johns Hopkins University, has conducted extensive research on the nation’s dropout epidemic, and developed a system to identify middle schools at risk of producing dropouts and middle school students at risk of dropping out.84 This identification system involving extensive data analysis allows for schools to develop a focused response to the recognizable problems, target middle school students and provide them with additional support services. These additional support services often include more frequent meetings with the school counselor, who works to help

82 Ibid.
students address the underlying issues affecting their learning in school. Balfanz argues the most effective way to reach a student typically involves assigning a specific adult, usually one of the student’s main teachers or counselors, with the responsibility of “shepherding the student.” Systems modeled on Balfanz’s recommendations have been implemented in many districts across the nation, and many report that they have seen improvements in behavior, achievement and dropout rates. This reform ought to be developed in areas like Chester because it helps address outside of school factors. It will help the administrators, teachers and counselors better understand and deal with the issues their students wrestle with.

**Additional Support Services**

A teacher’s effectiveness can be limited by the number of external factors that can have a substantial influence on a student’s ability to engage with learning. For example, in an area like Chester, where many families are in disarray, violence is an unfortunate reality and students are burdened with housing and financial instability, students are inevitably at a greater disadvantage because of these stressors. While organizations like TFA do feel as though an effective teacher can mitigate the effects of these external factors, I advocate for having more school psychologists trained and experienced in dealing with children facing these life obstacles. While all schools in high poverty communities may not need more school psychologists, this serves as an example of a reform strategy that appropriately responds to the needs and circumstances of the Chester community, and works enrich the teacher’s instruction and student learning.

**VI. Argument For Intervention**


86 Shepherding the student includes “building a closer, more personal relationship with the student, exploring the sources of student disengagement from school, and checking in daily with the student and giving that student immediate feedback” (Balfanz et. al., 232). PBS Frontline’s *Middle School Moment* exemplifies how shepherding is effective because it shows students not only that adults do care, but that they can do something to help overcome obstacles impeding school attendance, learning, achievement or behavior.
It is clear that schools in high-poverty areas are systematically disadvantaging the poor. However, there is an ongoing debate between experts and educators about the extent to which a school should be expected to compensate for gaps caused by the issues students bring to school with them. John Rawls provides a strong moral argument for the importance of increasing the educational opportunities available to low-income children. Today, a zip code unfairly has the ability to determine a child’s destiny. Through no fault of their own, children growing up in areas of concentrated poverty, or attending high-poverty schools, are more at risk for social, educational and economic failure. Rawls’s principle of fair equality of opportunity claims that regardless of class or income, all citizens should have access to the same economic and educational opportunities. I have shown that socially controllable factors can mitigate, if not eliminate, these arbitrary disadvantages.

As a society committed to equal opportunity, we are obligated to promote changes to expand and improve opportunities for those whose zip code has narrowed them. The moral argument for prioritizing school reform, and reducing the achievement gap is rooted in our failure to secure justice as equality of opportunity. While the school can only accomplish so much on its own, school reform efforts focusing on both internal and external factors, are essential for cognitive and social gains that measure advances in societal justice.

Apart from this moral justification for school efforts the economic implications of improving equality of opportunity ought to warrant intervention. The current consequences of these educational disparities are devastating. The Obama Administration, realizing the profound effects of childhood poverty on access to quality education, development of job skills, reduced economic productivity, increased crime and poorer health, conservatively estimates this problem
to cost the United States more than $620 billion per year.\textsuperscript{87} McKinsey & Co. released a report (2009) detailing the economic impact of the achievement gap, and communicated, “the educational achievement gaps in the United States have created the equivalent of a permanent, deep recession in terms of the gap between actual and potential output in the economy.”\textsuperscript{88}

Investing in school reform and providing equality of opportunity will yield substantial long-term benefits.

Not only does education have an impact on an individual’s productivity, and economic status by way of higher earnings, but also the human capital theory indicates that a more educated population will result in greater economic productivity for the aggregate economy. Educating the most marginalized groups of students nurtures human capabilities and paves the way for a stronger democracy. People with higher levels of education are more likely to lead healthier lifestyles (lower rates of smoking and obesity), and are more likely to be insured, thus consuming fewer public health resources.\textsuperscript{89} Additionally, individuals with more education are less likely to end up behind bars.\textsuperscript{90} More educated people are also more civically engaged. The McKinsey report reveals that high school graduates are twice as likely to vote than people with an eighth grade education or less, and college graduates are 50 percent more likely to vote than high school graduates.\textsuperscript{91} Thus, the report makes a strong case for investments in education increasing human capability, by saying “lifting the achievement of lagging socioeconomic and ethnic groups would almost certainly enhance the richness of America’s civic life.”\textsuperscript{92}

**Conclusion**

\textsuperscript{87} Whitehouse Neighborhood Revitalization Initiative
\textsuperscript{88} McKinsey and Company, 18.
\textsuperscript{89} McKinsey and Company, 19.
\textsuperscript{90} McKinsey and Company, 19.
\textsuperscript{91} McKinsey and Company, 20.
\textsuperscript{92} McKinsey and Company, 20.
School reform efforts are effective in helping both the individual and society as a whole because of its ability to improve equality of opportunity. Educational interventions have compelling economic and moral justifications. If children are the future of our country, then society ought to realize the moral and economic reasons to increase educational opportunities, and do everything that it can to help students succeed. When we fail to ensure all children have the ability to attain a quality education, as a society we pay a huge cost in moral, civic and economic terms.

In a nation that prides itself on being the land of equal opportunity, cities like Chester, PA illustrate the reality that, to a great extent, the neighborhood into which children are born still predicts their educational outcomes and, in turn, their life opportunities. Middle school students attending high poverty urban schools continue to underperform; they fall behind the achievement levels of their peers in more affluent neighborhoods, and start to exhibit signs of disengagement from school. Because a child’s academic achievement and educational attainment rely on a multitude of aspects of the child’s life, many of which are outside of the school, school policy reform can only go so far. However, it is possible to reduce the effects of educational inequity, and school reform can and ought to play a substantial role. Generic school reform efforts are not sufficient. The recommendations in this paper expand opportunity and improve public good in society. Moving forward with the movement to provide all children with an exceptional education, regardless of their neighborhood, family or life circumstances, it is imperative that education policy respond to the particular needs of the community, and that it is shaped by rigorous evaluation of these reform strategies, and evidence about what actually works in practice.
Works Cited


