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Untapped Talent: Finding Ways to Educate America's Low-Income High-Achieving Students

Kelly M. Siddle
mksiddle@sas.upenn.edu

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Abstract

It is well established that many students enter the classroom unprepared for the academic requirements awaiting them and spend most of their school years attempting to catch up to grade-level standards. According to a report by the National Assessment of Education Progress, almost two-thirds of the nation's fourth- and eighth-graders score below grade-level in both math and reading assessments. As a result, education policy often focuses on program development geared towards augmenting the performance levels of these under-achieving students. While these statistics are staggering and the United States' education system must strive to alleviate poor performance, it must also allow not lose sight of the other one-third. School systems must promote equal progression of students at every level. Unfortunately, despite the saliency of the challenges facing low-income high-achieving students, this population has remained largely unaddressed on the national and local scene. In order to insure the success of low-income students and use their talent to its utmost potential, public schools across the nation need to implement programs specifically designed to fit the needs of these individuals. In essence, the government needs to work to close the achievement gap between low- and high-income high-achieving students.

Untapped Talent

Finding Ways to Educate America's Low-Income High-Achieving Students

Kelly M. Siddle
University of Pennsylvania
Department of Political Science

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I. Introduction

The Gesu School Experience

The children added a bright radiance to the already glowing classroom. With its fresh coat of paint and colorful bulletin boards all in place, the classroom was ready to begin its tenure as the first location of the Gesu Youngest Scholars program. It looked like a fitting home for the 21 children who settled into their seats around the white board. The eager students had been selected for the program by their principal, and represented the best and brightest of the incoming third through fifth grade classes. I sat in the back quietly observing their interactions and wondering what would unfold in the coming five weeks. As an outsider to the school, I did not know a single face. I wondered about the students—their backgrounds, their abilities and their futures. My co-teacher Colleen stood at the front making preliminary introductions and establishing the tone of the program. I had been introduced as *Ms. Kelly*, a teaching assistant, and my experience with the children officially began.

The students sat neatly and quietly in their rows. I was impressed at their apparently high level of focus and respect as they resisted the allure of goofing off with their nearby classmates. I walked around passing out nametags to each of the students as Colleen moved on to the next subject—expectations. As I returned quietly to my seat in the back, I took out my purple spiral note pad to jot down the suggestions the students made regarding expectations for the program and their own behavior. Most of the usual answers were called out—"listen to others," "be on time," and "listen to adults;" but a few of the answers struck me as particularly unique. One child suggested that you

should always "be your best." Another settled on the importance of "respecting others' feelings." These two concepts were ideals that were more difficult to measure; of course you should wait your turn to speak, but what does it really mean to respect another's feelings or always put 110 percent into your assignment? I felt excited for the opportunity to work with these bright, respectful, driven, and exceptional young scholars.

Before I knew it, a group of students was called to join me in the other classroom. I was in charge of the communication component of the summer curriculum—teaching public speaking and reinforcing thematic concepts through a series of short plays. I had no idea what was expected of me; I had never worked with students like these. How much did they know already? What exactly did *advanced* mean for this urban school? I sat down across from the eight dark eyes peering up at me and began:

"Let's start by going around the room, saying our names, and what we would be doing during the summer if we weren't attending Youngest Scholars."

All of the kids followed suit. I should not have been surprised by their responses—"I play video games," "I watch the Disney channel,"—but I also could not help comparing their lifestyles with my own childhood summers comprised of county fairs, basketball tournaments, and summer camps. I felt an inexpressible twinge of sadness pass through me for the many opportunities these children would never have and hoped that this program would begin to bridge the gap.

Three weeks later I again found myself at the back of the classroom—however this time around I was not waiting to teach a lesson, but to receive one. My students had put in a diligent week and a half's worth of work rehearsing a play about the

American Revolutionary War to conclude their unit on colonial America. Now they stood at the front, ready to perform. A small audience had gathered for the occasion, comprised of parents, grandparents, and even a few local reporters. Each child had been assigned multiple roles, ranging from King George to Molly Pitcher. Unfortunately, a few students were absent that morning, removing prominent characters from a number of scenes. My stress dissipated as I proudly watched the students take control of the situation. They took turns volunteering to read the missing lines and working together to quietly transition from one scene to the next without any prompting on my part. This cooperative spirit surprised me. I reflected on the struggles the children had faced when asked to work together only days before. On more than one occasion, physical fights had broken out during cooperative group activities. This time around, the children excitedly engaged with the material and with one another as they morphed from North Philadelphia elementary school children into colonial historical figures. Angel adorned her jester hat constructed out of paper as she offered advice to King George; Javier, Khalid, and Kharon put on their tricorner hats and hid patiently behind desk chairs waiting to ambush the British soldiers.

As the days wore on, I attempted to get to know the individual students outside of a strictly academic environment. One day Charnae came into the room earlier than usual and sat with her head on her desk. She explained to me that she had to wake up at 4:30 am most mornings. She was dropped off at her mother's boyfriend's house and was unable to go back to sleep before coming to school. Kimberly often finished her work before her other classmates. She said she was often bored in class. Before the end of the Youngest Scholars Program, she transferred to another summer camp

because this program "felt too much like school." Nysir spent his days chiding his classmates and ignoring his work. One afternoon I kept him after class so we could talk about his goals. I hoped that getting to know about his personal expectations would help me find a way to motivate him. I discovered that not all children dream of growing up to become doctors or firefighters—some do not expect to live past their teenage years.

From the opening minutes of the program to our last moments together, I got to know and understand the students, hear their stories, and discover their goals. At times I was pleasantly surprised by their strengths, at other times I was frustrated by their limitations. Mostly I was discouraged by the obstacles that prevented them from reaching their full potential. One thing remained constant throughout the duration of my observations—these students had real academic ability and the promise of bright and successful futures. Unfortunately, they were not guaranteed the opportunity to capitalize on these strengths. My work with the Youngest Scholars opened my eyes to the shortcomings of our current educational system.

Characterizing the Problem

All across the nation, young students from backgrounds similar to Charnae, Kim, and Nysir outperform their peers on standardized tests. Their outstanding achievement suggests bright academic futures. Sadly, their high-achievement levels often drop off before they have the chance to realize the benefits of accelerated educational attainment. Programs such as the Gesu's Youngest Scholars may start to alleviate some of the inadequacies, but students such as mine, from low-income backgrounds,

still continue to face insufficient resources that severely limit their ability to succeed. Far too few of these students are using their natural academic aptitude to graduate from high school and continue on to college.

It is a well established fact that many students enter the classroom underprepared for the academic requirements awaiting them and spend most of their school years attempting to catch up to grade-level standards. According to a report by the National Assessment of Education Progress, almost two-thirds of the nation's fourth- and eighth-graders score below grade-level in both math and reading assessments.[1] As a result, education policy often focuses on program development geared towards augmenting the performance levels of these under-achieving students. While these statistics are staggering and the United States' education system must strive to alleviate poor performance, it must also allow not lose sight of the other one-third. School systems must promote equal progression of students at every level. Unfortunately, despite the saliency of the challenges facing low-income high-achieving students, this population has remained largely unaddressed on the national and local scene. In order to insure the success of low-income students and use their talent to its utmost potential, public schools across the nation need to implement programs specifically designed to fit the needs of these individuals. In essence, the government needs to work to close the achievement gap between low- and high-income high-achieving students.

Current research on this cohort is severely limited. In fact, many of the most comprehensive research papers on these students are still in the working phase. The dearth of programs aimed at correcting these inequalities reflect the lack of attention

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[1] Peterson, Kavan. "State of Education: Who Makes the Grade?" Pew Research Center. 26 January 2006. http://pewresearch.org/pubs/5/state-of-education-who-makes-the-grade

that has been given to these students. Since very few programs exist that specifically

serve low-income high-achieving students, it is difficult to find implementable solutions

based on best-practices data review. However, the path towards finding a workable

solution must start somewhere. Therefore, solution proposals must creatively use

available data to attack the challenge from two angles. First, a solution must implement

positive and proven practices of existing programs for gifted or low-income students.

Simultaneously, the proposal should address the underlying causes that have

contributed to the magnitude of the existing gap. For example, programs of longer

duration during the school year will be more effective in augmenting students' continued

success by affording them additional academic exposure and reinforcing an atmosphere

of learning. Furthermore, program designs specifically tailored to the unique needs of

urban students, such as curriculum content, will be more effective with these

populations than gifted student programs that serve individuals across the economic

spectrum. In addition, barriers created by inconsistencies in the selection process for

gifted education programs further discriminate against the ability of low-income students

to participate in traditional gifted education curricula. New programs must begin the

selection process at a young age and without socioeconomic or racial bias.

Additionally, these program recommendations will highlight the political

importance of improving the graduation rates of this population as it relates to important

social issues framing the challenges of contemporary American domestic politics.

Creating upward economic mobility for the brightest minds in our most challenged

neighborhoods and school systems will play a significant role in revitalizing these

populations while equalizing educational opportunity across economic status. By

creating schools of a positive learning climate, these neighborhoods will continue to attract talented and motivated teachers while turning negative academic environments into institutions supporting bright and creative minds. Education can be the keystone in building an environment of positive change.

Assimilating existing research with my own first-hand experience, the following chapters will seek to define the low-income high-achieving student cohort, characterize their shortcomings, evaluate the existing programs, and recommend a new path forward.

II. Identifying Low-Income High-Achieving Students

Defining Low-Income High-Achieving Students

Disparities of equality in the United States education system have produced schools that are achieving at rates significantly lower than others. Generally, these schools are serving low-income urban populations and lack the resources of their suburban counterparts. The cause of this disparity is often related to historical events concerning racial segregation and the suburbanization of major United States cities following World War II.[2] Past policy decisions have attempted to rectify this inequality, but the failing condition of many urban schools remains, as evidenced by the significantly lower high school and college graduation rates of students of low socioeconomic status.

However, within this population, millions of students overcome the odds and achieve at high levels. They supersede cultural and economic barriers, reaching unexpected standards and surpassing the ability of the majority of their peers of all socioeconomic backgrounds. Unfortunately, the talents of these students are largely unrealized, as low-income high-achievers fall off of this academic track at a much faster rate than their high-income counterparts. With political responses to school inequality generally aimed at providing remediation to those falling short of grade-level standards, little government response has helped to support and encourage growth among the low-income high-achieving population. Far too few of these students are using their natural academic aptitude to graduate from high school and continue on to college.

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[2] Neckerman, Kathryn M. "Schools Betrayed: Roots of Failure in Inner-City Education." University of Chicago Press. 2007.

Current research has illuminated distressing statistics on this population—but

who exactly does this population include?   Both "low-income" and "high-achieving" can

be defined according to various tiers. Low-income can refer to those slightly below the

national median or families living below the poverty level. High-achieving may

reference those in the top five percent or the top twenty-five percent. Ultimately, the

cohort can shrink and expand according to degree, making it difficult to exactly pinpoint

any one group of students. Using a broad definition, including those achieving in the

top quartile academically and residing in households below the national income median,

low-income high-achieving students constitute a larger number of students than might

be expected. According to a recent study conducted by the Jack Kent Cooke

Foundation and Civic Enterprises, 3.4 million children fit these criteria. Even after

narrowing the definition to include only those students receiving free or reduced lunch,

the population remains at striking levels, with over one million children identified in this

cohort.[3]

This inclusive definition gives us a good starting point towards understanding the

low-income high-achieving population, but there are other factors which should be

considered when identifying this under-served student population. Traditionally, much

of academic performance research has focused on the black white achievement gap,

rather than defining the difference only in terms of socioeconomic status. The trend is

no different when it comes to the high-achieving student cohort. Urban schools that

serve disadvantaged students also maintain higher populations of ethnic minorities.

The College Board founded the National Task Force on Minority High Achievement to

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[3] Wyner, Joshua S., et al. "Achievement Trap: How America Is Failing Millions of High Achieving Students from Lower-Income Families." Jack Kent Cooke Foundation Report.

address the needs of these students. By examining the achievement of White, African-American, and Latino students, the task force could compare the results and look for racial variations. It is no surprise that they found significant differences between the achievement levels of White and minority students, and again identified a surprisingly high number of students who fall into the low-income high-achieving category. The College Board study identified over 30,000 African-Americans in first grade alone who score in the top quartile academically on standardized tests.[4] While racial classification and economic status can by no means be used interchangeably, it is important to examine the similar challenges faced by both and consider the cultural needs of the many disadvantaged minority students when evaluating student performance and weighing public policy options. Therefore, minority students form a valuable part of this definition and their results will be examined alongside the numbers reported irrespective of racial lines.

The numbers illuminated by these definitions are impressive and revealing. They prove that low-income children have academic potential and natural talents that can provide valuable societal contributions and help their families find economic stability. Furthermore, these cases are not isolated to extraordinary instances but encompass astonishing numbers deserving of immediate action.

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[4] Borman, Geoffrey D., et al. "Advancing Minority High Achievement: National Trends and Promising Programs and Practices." The National Task Force on Minority High Achievement. *The College Board*, 2008.

Evaluating Student Performance

We have established that millions of low-income students possess outstanding academic ability. Unfortunately, this impressive data does not yield consistently positive results. While many students excel at their studies, the numbers express volatility when spaced over grade-level and subject content. Low-income students account for only 28 percent of the total high-achieving population, beginning in first grade, while high-income pupils make-up the remaining 72 percent. These students start with a disadvantage and continue to face a higher degree of obstacles along the way. Even as many external factors, such as limited access to preschool education, influence the level of academic performance before low-income students enter the school system, one would assume that enrollment in school would increase these students' educational growth by providing them with structured instruction on a daily basis. Sadly, the opposite is true. Of the high-achieving first-grader population, a significant number will fall off of this successful academic track by the time they complete elementary school, and an even higher number will drop out of the top academic quartile before finishing high school. In both reading and math, more than 25 percent of those classified as low-income high-achieving students in eighth grade, will descend into the bottom three quartiles by the end of high school.[5] Figure 1 demonstrates these differences in achievement level by economic category.

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[5] Wyner, Joshua S., et al. "Achievement Trap: How America Is Failing Millions of High Achieving Students from Lower-Income Families." Jack Kent Cooke Foundation Report.

Figure 1: High-Achieving Disparities as Percent of Total

■ Low-Income ■ High-Income

Category	Low-Income	High-Income
1st Grade High Achievers	28	72
Retention: Elementary Reading	56	69
Retention: High School Math	76	84
Chance of Graduating College	59	77
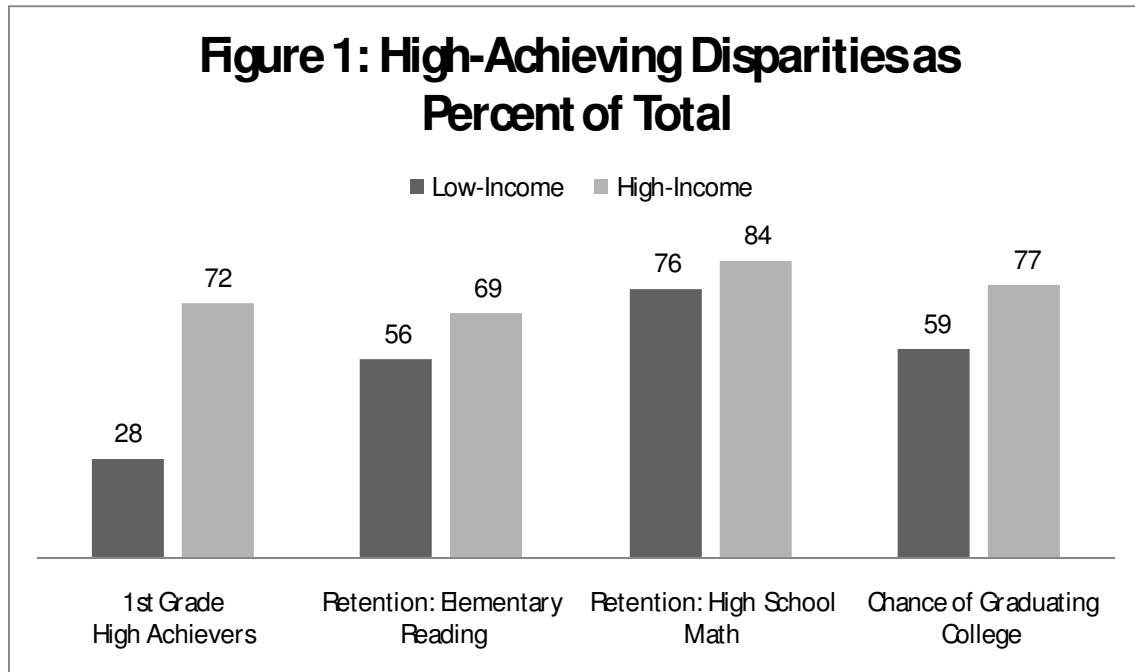
Jack Kent Cooke Foundation

As illustrated by the chart, the higher-income cohort consistently outperforms their low-income peers in every category across the board. Only slightly more than half of high achieving low-income first graders will perform in the top academic quartile on standardized reading tests by the completion of fifth grade. Elementary school is an essential and formative time in a young student's education. During these years, students need to glean the essential learning tools that allow them to excel when challenged with more difficult material and abstract ways of thinking. Unfortunately, this data suggests that elementary schools are failing these students by not providing them with the materials necessary to maintain the high level reading and math abilities vital to future scholastic success.

In addition to losing the existing high-achievers, very few low-income students will ever rise from lower achievement levels into the top performing group as they progress through the school system. As schools function to increase learning capacity,
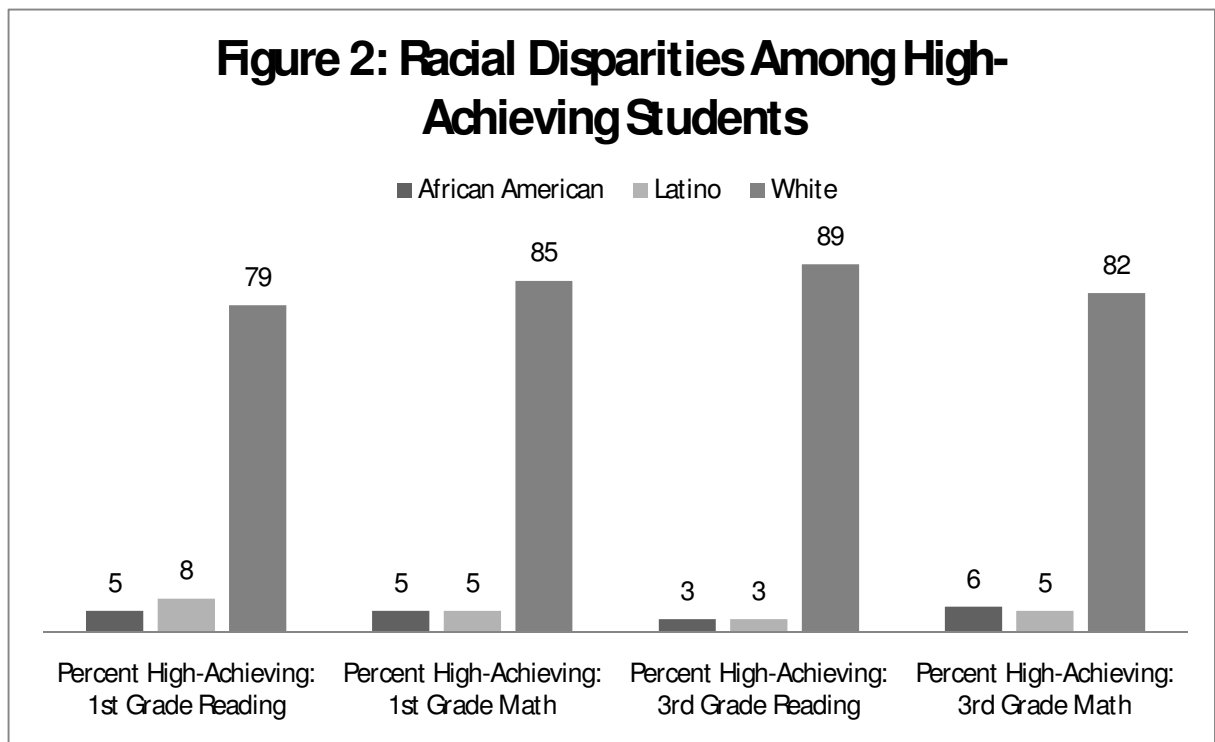
one would hope that time in the classroom leads to increased achievement levels among students regardless of external factors such as income. The results reflect otherwise. During the elementary years, first through fifth grade, 17 percent of high-income students will move from a lower achievement level into the top academic quartile compared with only 7 percent of low-income children. The chances for advancement are similar in high school, with 12 percent of high-income students improving while only 6 percent of low-income individuals advance. Such disproportionate performance, even among those of similar academic ability when entering school, reveals an inherent inequality in the school system's ability to provide adequate educational services to the low-income population.

As denoted by the earlier definition, schools serving primarily low-income neighborhoods often also have a disproportionately high number of minority students. Statistics on the high-achieving minority population therefore, mirror the above statistics in many ways, and further suggest that the current school system does not provide adequate opportunities to stimulate the growth of high ability young scholars.

The College Board conducted a study in 2000 to track the achievement levels of young minority students. The national sample followed a group of first graders through third grade, tracing the achievement levels of the diverse group of students in reading and math. They found that minority students and those of lower socioeconomic status "begin a process of disengagement from school from the time they begin first grade,"

and that their achievement levels diverge from their white, advantaged peers as they progress through school.[6] Figure 2 illustrates these differences.

The first two columns show the initial disparity between the racial groups. White students enter first grade with a marked advantaged. The most troubling results are illustrated by the change in reading percentage between the same students in the two years spanning first and third grade. The percentages of African Americans and Latinos achieving in the top quartile both decrease while the number of advanced Whites increases by 10 percent. The more time that minority students spend in the classroom, the poorer they perform on standardized tests, while White children continue to experience academic growth and achievement.

Figure 2: Racial Disparities Among High-Achieving Students

■ African American   ■ Latino   ■ White

5	8	79
5	5	85
3	3	89
6	5	82

Percent High-Achieving: 1st Grade Reading | Percent High-Achieving: 1st Grade Math | Percent High-Achieving: 3rd Grade Reading | Percent High-Achieving: 3rd Grade Math
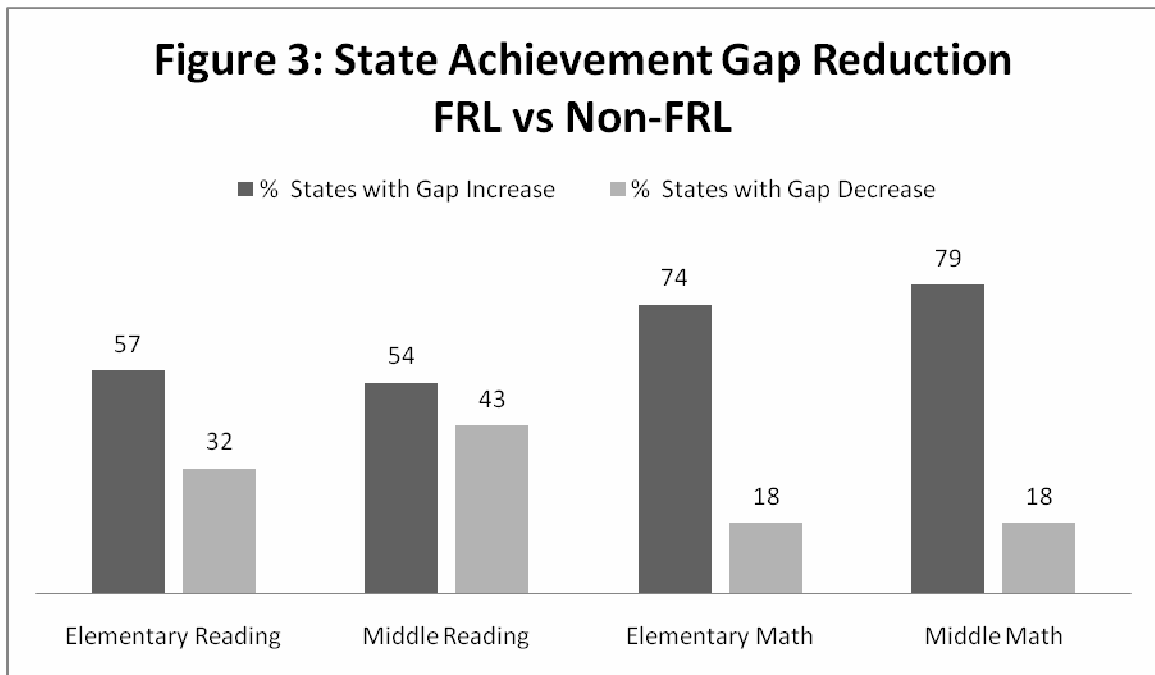
The College Board

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[6] Borman, Geoffrey D., et al. "Advancing Minority High Achievement: National Trends and Promising Programs and Practices." The National Task Force on Minority High Achievement. *The College Board*, 2008.

These results reveal the failure of the United States school system to adequately meet the needs of underprivileged and minority students. Because their achievement levels are consistently decreasing, a large deal of the responsibility for their academic failure rests on the shoulders of the school. It is both exposing and disconcerting that a serious academic problem affecting this staggering number of children has not gained more attention nor solicited a plurality of purposed remedies. With human capital serving as the most important resource in our nation, these children deserve the attention of policy makers. In order to combat the societal inequalities that continue to dominate the urban scene, equal educational opportunity must be afforded to the brightest and best students, regardless of income or race.

Although these gaps are troubling on their own, perhaps even more discouraging is the fact that they are not being alleviated. In an effort to provide an evaluation on the impact of No Child Left Behind on student academic growth, the Human Resources Organization performed a comprehensive evaluation of advanced students by state. The study found that less than half of the states saw a reduction in the achievement gap between minority groups and whites and children receiving free or reduced lunch versus those who do not. The students in the latter comparison group experienced the smallest gap reduction. This held true in both reading and math and at the highest achievement levels. While the data clearly illuminates the existence of this educational disparity, educators are not demonstrating a marked effort toward alleviating inequalities; rather, they are allowing them to grow. The following graph depicts the percentage of states that experienced a change in the gap size between the number of

high-achievers receiving free and reduced lunch (FRL) and those not eligible for the

FRL program.[7]

Figure 3: State Achievement Gap Reduction FRL vs Non-FRL

■ % States with Gap Increase   ■ % States with Gap Decrease

	Elementary Reading	Middle Reading	Elementary Math	Middle Math
% States with Gap Increase	57	54	74	79
% States with Gap Decrease	32	43	18	18

Human Resources Organization

The results reported in Figure 3 confirm the magnitude of the inequality of

education provided to initially low-income high-achieving students. Particularly in Math,

an overwhelming majority of states continue to fail their low-income students, allowing

them to slip out of the highest achievement levels and fail to reach their academic

potential. The ability of the United States education system to serve these children is

getting worse by the year. Seventy-four percent of states have failed to find ways to aid

the success of their smartest pupils in elementary level Math; that number increases to

79 percent by the time these students reach middle school. Clearly our current policies

are not providing the necessary impetus to motivate schools toward advancing the

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[7] Gribben, Monica A., et al. "Are Advanced Students Advancing? Examining AchievementTrends Beyond Proficiency." *Human Resources Research Organization*. March 2008.

achievement of all of their students. Sadly, the brightest pupils are now the ones being left behind.

Finally, it is important to realize that achievement gaps are concentrated at the highest achievement levels, exercising the greatest deal of harm on high-ability students of color or low socioeconomic status. It is commonly assumed that these disadvantaged students simply achieve at a lower-level than their white affluent peers, but the research offers compelling evidence that it is indeed the brightest students that suffer the brunt of the impact from the academic shortcomings of the United States public school system.   In a recent study from the Institute for Research on Education Policy and Practice, Sean Reardon used data from the Early Childhood Longitudinal Study-Kindergarten Cohort (ECLS-K) to compare achievement gap levels across the ability spectrum. His evaluation concluded the following:

> *The results indicate that reading and math test scores diverge more*
>
> *between kindergarten and fifth grade among students who enter*
>
> *kindergarten with high levels of reading and math skill than among*
>
> *students who enter with low levels of reading skill.*[8]

The numbers supporting this conclusion are alarming. Black students who enter kindergarten with scores at least one standard deviation above the mean fall behind their white peers at a rate twice as large as those posting average test scores by the time they reach fifth grade. Not only are the schools failing to maintain achievement across racial and economic lines, they are also inversely effecting the students who

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[8] Reardon, Sean F. "Differential Growth in the Black-White Achievement Gap During Elementary School Among Initially High- and Low-Scoring Students.*" Institute for Research on Education Policy & Practice.* March 2008.

enter school ready to learn and attain high academic levels regardless of the economic hindrances that have prevented them from exposure to additional educational opportunities and services. The school system should not be punishing those with the natural aptitude and ability to learn, but rather stimulating their untapped creativity and imagination, allowing them to flourish to their fullest scholastic capacity.

In order to move towards equality of opportunity, policy must focus on the earliest years of schooling. As the data revealed, more and more students drop off of the high-achieving track as they advance through the school system. Therefore, in order to increase the number of high ability low-income students that sustain their achievement throughout high school, intervention must occur during these formative years. Sadly, even those lucky enough to make it through high school in the top quartile will likely not complete college. According to the 2006 Secretary of Education's Commission on the Future of Higher Education, "Low-income high school graduates in the top quartile on standardized tests attend college at the same rate as high-income high school graduates in the bottom quartile on the same tests. Only 36 percent of college-qualified low-income students complete bachelor's degrees within eight and a half years, compared with 81 percent of high-income students."[9] These alarming characteristics should grab the attention of policy makers and education specialists as they find ways to foster a climate of impartiality that represents the American ideology of equal opportunity for all of its citizens.

Ultimately, we must decide what programmatic responses will close the achievement gap between these two cohorts of high achieving students, first by

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[9] U.S. Department of Education, "A Test of Leadership: Charting the Future of U.S. Higher Education." A report of the Commission Appointed by Secretary of Education Margaret Spellings. September 2006. <http://www.ed.gov/about/bdscomm/list/hiedfuture/reports/final-report.pdf>

investigating the conditions contributing to this disparity. Then, the following sections

will explore existing gifted education programs, evaluate their strengths and limitations,

survey theoretical solutions, and synthesize the information into a set of recommended

practices for implementation.

Characterizing the Barriers Facing Low-Income High-Achieving Students

The data confirms that schools are not adequately stimulating the minds of the

nation's highest achieving students, but where are they falling short? In order to begin

to conceptualize some of the political remedies that will aid these children, it is

necessary to understand the barriers that currently stand in the way of academic

advancement for the low-income high-achieving student cohort. These limiting factors

rely heavily on established education goals and policies, gifted identification techniques,

and the limitations of the advanced programs offered to high-achieving students.

In recent years, education policy has attempted to shift toward an accountability

model, holding each school responsible for demonstrating Adequate Yearly Progress

(AYP) by pushing all students to achieve at grade level. As a result, school curriculum

has grown increasingly geared toward standardized testing. The specific content

knowledge necessary for adequate performance on the test has an interdependent

relationship with school funding levels and test results. Therefore, school curricula have

become more scripted and rigid, limiting the decision-making ability of the teacher. The

confining academic standards established by the legislation of No Child Left Behind

places emphasis on reaching school-wide AYP goals, not on assuring that all students

are demonstrating yearly progression based on their individual ability levels.[10] This

causes a disproportionate amount of teacher attention to focus on the lower end of the

achievement spectrum, leaving advanced students free to disengage from class or float

through the academic term unnoticed.

Even when extraordinarily exceptional teachers become cognizant of the

limitations of the new school curricula, their hands are frequently tied by administrative

obligations and policies. Confining regulations quell the teachers' desires to meet the

needs of each of their individual students. One teacher expressed her frustration at the

limiting constraints currently plaguing many public schools: "Children learn best when

teachers can meet their individual needs as learners. When we are required to teach

the same lesson to every student on a defined time schedule, it is impossible to meet

individual student needs."[11] Lessons such as the ones mentioned by this teacher are

targeted toward the middle achievement level of the students in the class. The lessons

must challenge the students who have fallen behind, but not overwhelm their limited

ability. They must maintain grade-level performance and insure that the necessary

number of students reach performance criteria on standardized testing day so that the

school can continue to operate. In essence, the content of these lessons is not

designed to insure maximum growth for every learner, but to reach an administrative

goal that demonstrates disregard for the individual learning capabilities of every student.

This model drastically impacts teacher motivation and how they relate to the students in

their classrooms. With their performance intimately linked to their ability to meet

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[10] U.S. Department of Education. "No Child Left Behind."
<http://www.ed.gov/nclb/accountability/ayp/edpicks.jhtml?src=ln>
[11] Johnston-Parsons, Marilyn [et al.]. *Success Stories from a Failing School: Teachers Living Under the Shadow of NCLB.* Information Age Publishing, Inc. Charlotte, North Carolina, 2007. Pg 58

classroom AYP, which does not measure growth made by high-performing students, teachers have little impetus to focus their efforts on these bright and capable minds. For many, this means abandoning their ideas of educational advancement and adopting the language of national legislation as their new mantra. One teacher put it this way: "Since 1975, Public Law 94-142 has required school districts to provide a 'free and appropriate public education' for every child in 'the least restrictive environment.' "But the term 'appropriate' is coming more and more to mean 'exactly the same as everyone else.'"[12]

Not only do standardized test-based curricula by nature exclude the advanced students from engaging on an appropriate academic level, but their content also often maintains an inherent bias against low-income and minority students. An analysis of two widely used standardized tests concluded that "50-75% of the questions were aptitude and SES [socioeconomic status] questions," suggesting that the tests were "not measuring what is directly taught in school but depended on inherited and class-related knowledge."[13] If a child does not possess the cultural understanding and knowledge to comprehend the content of a question, regardless of their ability to perform the function asked, that child will not demonstrate adequate ability on that exam. While administrators understand the necessity of striving for high performance results on these tests, they also understand these cultural limitations. Carmen Perez-Dickson, the principal of an elementary school, expressed her view of this learning approach. "We're not phony. That does not work; just teaching to the test does not work. It has to be holistic. It has to be more than passing the test. We care about learning about others;

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[12] Johnston-Parsons, Marilyn [et al.]. *Success Stories from a Failing School: Teachers Living Under the Shadow of NCLB.* Information Age Publishing, Inc. Charlotte, North Carolina, 2007. Pg 43
[13] Johnston-Parsons, Marilyn [et al.]. Pg 6

we want our children to be sensitive to each other. We care about the whole child and family. We are a whole learning community."[14] The challenge facing educators is finding the ability to create this learning community within the confines of restrictive and narrow academic goals and budgetary constraints. While advancing every student to grade-level and helping stimulate the academic potential of under-achievers is admirable and necessary, these policies continue to limit the ability of the nation's brightest. Measures must be taken to identify these students and help them to excel.

Aside from the tendency for schools to overlook the needs of high-achieving students, additional limitations constrain the opportunities for low-income and minority students within this category. Schools that do offer gifted or advanced enrichment for high-achieving students often rely on teacher recommendation for child selection. Unfortunately, research demonstrates that teachers often operate within established biases leading them to overlook high-achieving individuals from racial minorities or impoverished families. Statistically, the number of high-achieving low-income and minority students is underrepresented in comparison to their population in the student body as a whole. In a 2008 study, one quarter of teachers surveyed expressed that they felt socioeconomic status to be "a major determinant factor" in possessing academic giftedness. As a result, research reveals a negative relationship in the correlation between gifted program attendance and student socioeconomic status.[15] Even when a low-income student is performing at a high ability, he or she may easily be overlooked because of the constant link between socioeconomics and ability in the mind

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[14] Lyman, Linda L. and Christine J. Villani. *Best Leadership Practices for High Poverty Schools*. Scarecrow Press, Inc, Maryland 2004.
[15] Hala Elhoweris. "Teacher Judgement in Identifying Gifted/Talented Students," *Multicultural Education*, Vol. 15 No. 3, Spring 2008, pg 35-38

of many teachers. In addition to using economics as a determining factor, teachers were also more likely to refer white students to a gifted program than African American or Latino students by a difference of nearly one full standard deviation. They also routinely characterized academic achievement based on stereotypical perceptions of giftedness associated with advantaged students. For example, 75 percent of the teachers said they could not imagine a gifted student who used a limited vocabulary. This identification heuristic automatically rules out students from minority backgrounds that may not speak English as a first language, or those from lower socioeconomic status that have not been exposed to a particular vocabulary set in their homes or communities. [16]

In addition to the cultural biases unconsciously executed by school faculty, it is a common perception that many urban high-achieving students do not want to be classified among the gifted population because this label may trigger negative responses from their peer group and community members. In 2005, a study group supported by the Institutes of Education Sciences of the U.S. Department of Education tested cultural perceptions of high-ability students based on low-income elementary students. The study confirmed that contrary to popular opinion, low-income African American children view high academic attainment rather favorably; however, these opinions are contingent on cultural characterizations. The study was conducted by presenting a variety of cultural scenarios stemming from African-American and European-American academic traditions. The survey results confirmed that low-income students identified favorably with the high-achievement of students within their cultural

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[16] Tonya R. Moon and Catherine M. Brighton, "Primary Teachers' Conception of Giftedness." *Journal for the Education of the Gifted*. Vol. 31, No. 4, 2008, pg 447-480.

context and may be exhibiting not a rebellion against academic achievement, but rather against the cultural influences of traditional schooling environments. This study reiterates that standardized curriculums are damaging the ability of many low-income minority students by failing to provide them with a relevant and inspiring classroom experience that will motivate them to place high value on their academic performance and strive to push themselves to realize their full individual potential. When school culture alienates a large number of students, positive learning reinforcement is not taking place.[17]

Grade-level also serves as a debilitating factor in providing equitable gifted identification across cultural and economically diverse student cohorts. Teachers are often reticent in identifying students as "gifted" at a young age. In fact, in a 1999 survey, only half of teacher respondents believed that students should be identified as "gifted" at a young age and only 7 percent said that they would support gifted programming in elementary school.[18] This attitude enhances the challenges underprivileged children will face by limiting their ability to study at an appropriately challenging level during the formative years of their education. As previously discussed, high-achieving students fall off of the advanced track at a much faster rate during elementary school years. By being denied the opportunity to excel from the onset of their education, they will continue to fall behind and out of the top percentiles by the time they graduate high school and contemplate entering an institution of higher learning. Even in schools where gifted programs do cater to the needs of advanced

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[17] Boykin, A. Wade, et al. "Culture-Based Perceptions of Academic Achievement Among Low-Income Elementary Students." *Cultural Diversity and Ethnic Minority Psychology*. Vol. 11, No 4, pg 339-350.
[18] Sankar-Deleeuw, N. "Gifted Preschoolers: Parent and Teacher Views on Identification, Early Admission, and Programming." *Roeper Review*, 21. Pg 174-179

middle and high school students, most low-income high-achievers will fall off of the charts before they get there. Current gifted programs do not address the achievement gap experienced between the low-and high-income students of comparable age and ability, and current policies only serve to further bias the system against allowing these individuals to achieve to their potential.

As the system currently exists, the design of the United States public education system is creating many barriers to low-income high-achieving student achievement, particularly at the elementary school level. Without the funding, the motivation, or the ability to properly identify and serve these students, the talent they possess will continue to slip through the cracks of the system.

III. Examining Existing Programs

While the current academic environment for low-income high-achieving students is certainly not conducive to stimulating their intellectual growth, a few select programs across the country have made attempts to provide these students with a platform for success. Even as many of the programs were not tailored toward this particular student cohort, the components of their design have allowed high-ability students to flourish within the construct of their services, demonstrating that it is possible for academic services to simultaneously reach out to students of all abilities. Unfortunately, programs with these qualities are few and far between, and thousands of students are being deprived of the positive utility provided by their operation. This section will look at the tools these select programs use to reach their ambitious goals and the results they have been able to achieve. In order to begin to frame the problem in terms of its solvable components, it is important to evaluate the pieces of these programs that have positively influenced student outcomes.

Building Educated Leaders for Life (BELL)

Like many similar initiatives, Building Educated Leaders for Life (BELL) is a product of the hard work and desire of a few individuals who saw a need in their community and worked to fill it. The BELL Program began as a small tutoring service designed by Harvard Law students to provide after-school and summer learning programs to under-achieving students in math, reading and writing. With the intention to help these struggling students make it to grade level, the tutors went to work. What began as an innovative idea propelled by motivated individuals with a desire to impact

one local school has now spread to serve over 35,000 young students. Today, the

program operates in Boston, New York, Baltimore, and Detroit and is continuing to look

for partnerships that would provide them with the opportunity to expand to other high-

need areas. BELL hopes to expand its services by acting as a model program for

others to emulate in high-needs districts across the country.

BELL focuses on two major programs: after-school and summer. Both seek to

provide supplementary educational services to low-income students outside of the

regular instruction time provided by the traditional school calendar. The programs

consist of seven main components:

1. Tutoring in literacy and math with research-based and multicultural
   curricula.
2. Mentoring from positive adult role models to build self-esteem and respect
   for others.
3. Staff of committed certified teachers and trained college-age tutors.
4. Small-group instruction.
5. Experiential learning through guest speakers, field trips and service
   projects.
6. Support for parents to engage as advocates and facilitators of their
   children´s education.
7. Rigorous evaluation for demonstrating results and continually improving
   program.

BELL After School runs for two and a half hours, five days a week, following the

conclusion of the normal school day. The Summer Program strives to fill the summer

learning gap by providing educational services from 8:30 am to 4:30 pm, five days a

week. Aside from the difference in duration, both programs strive to meet the goals

outlined above and follow similar programmatic structures. The day consists of direct instruction in math and literacy while also providing enrichment opportunities and group time to build student cooperation and socialization. From day one of the program, this structure has proven effective. The first class of BELL scholars had a perfect college attendance rate as 100 percent of the class went on to graduate or enroll in further education.

Several factors contribute to the unique ability of Building Educated Leaders for Life programs to more efficiently provide for the academic needs of each individual BELL scholar. Primarily, they have the advantage of working with extending learning-time while implementing data-driven instruction methods. They also use this data to shape their teacher training program and monitor teacher performance based on the educational approaches they deem most necessary and effective. The extensive BELL evaluation process has been lauded by leaders in the educational field and used as a best-practices model for many other national policy groups including Grant-makers for Education and the Center for American Progress. In order to provide comprehensive data on all of their students and the teaching methods they employ, BELL uses an interrelated series of tests including Standardized Tests, Skills-based Assessments, Standardized Social Assessments, Report card and portfolio tracking, as well as teacher, student and parent surveys. This combination of data-tracking not only measures how well students are performing according to national standards, but gives educators a complete look at all aspects of a child's progress including peer interaction and personal self-esteem. Curriculum choices can be tailored accordingly, providing a truly comprehensive educational approach to traditional classroom learning.

Operating outside of the constraints of the normal school system, these practices grant BELL programs the flexibility and adaptability that benefits all of their scholars. Student test scores clearly elucidate the impact of this comprehensive approach. In fact, 100 percent of BELL scholars who enter the program as "failing" according to standardized test results have advanced to a higher category after completing the program. Additionally, an astonishing 81 percent of BELL scholars achieve at proficient and advanced levels compared to only 30 percent of their demographic peers. Despite the time and attention that public schools devote to remedial efforts, BELL more effectively reaches these students and challenges them to the limits of their capabilities.[19]

The program's founders began this service to augment the ability of low-achieving students struggling in math and reading; but today the achievement levels of selected participants are so high that the program's construction now serves high-ability low-income students and helps them to continue their impressive achievement levels well through high school and into college. With the belief that the elementary school years provide the formative base for the rest of a child's educational career, Building Educated Leaders for Life continues to strive to turn low-income children into the young scholars they are capable of becoming.

Knowledge Is Power Program (KIPP) Charter Schools

Knowledge Is Power Program (KIPP) Academies were designed to serve under-resourced communities in the United States' poorest school districts. Beginning with just one school in Houston, Texas in 1994, KIPP academies now operate at 66

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[19] *Building Educated Leaders for Life.* <http://bellnational.org>

locations across 19 states and the District of Columbia. The academies define themselves as "free, open-enrollment, college-preparatory public schools where underserved students develop the knowledge, skills, and character traits needed to succeed in top quality high schools, colleges, and the competitive world beyond." As demonstrated by this motto, similar to the BELL programs, KIPP schools focus on a comprehensive approach to learning and strive to develop a complete and successful student capable of attacking the academic challenges that lay ahead in his or her academic future. The majority of KIPP schools serve middle school populations of fifth through eighth graders and focus on preparing them for entrance into competitive college preparatory high schools.

KIPP Charter Schools function under a "Five Pillars" philosophy:

1. High Expectations
2. Choice and Commitment
3. More Time
4. Power to Lead
5. Focus on Results

These pillars are designed to ensure that students understand there are no excuses to legitimize poor performance in school and that there are no shortcuts to attaining academic achievement. Once enrolled in a KIPP school the student and parents are making a commitment to uphold the governing principle of academic excellence. Because students choose to attend these institutions, the school can set rigorous standards and demand full participation from those they serve. They even implement contractual agreements to the teachers, students, and parents reinforcing

their pillar policies and the expectations of the school. Operating under this understanding alters the approach that low-income students take toward their education and provides the positive reinforcement and involvement they need to succeed.

In order to continue to operate under these rigorous standards, KIPP schools also use an extensive system of evaluation and review. The assessment consists of four key pieces: Annual Report Card, Independent Studies, Student Mobility, and School Reviews. All of these efforts aim at creating a transparent learning environment offering continuous means of improvement to their students. The Annual KIPP Report Card contains a comprehensive review of demographic characteristics and achievement statistics for KIPP students, divided into 'School Profile' and 'School Results' pages. In their effort to engage in full disclosure, the report is published each year and sent to all school associated affiliates and other interested contacts. Such disclosure challenges KIPP schools to remain accountable to their results, allowing easy comparison from year to year and giving the data visibility on a national scale.

In addition to their report card, KIPP produces two other forms of review to extend the coverage of their assessment into all aspects of the academic community: the study on student mobility and the internal school reviews. The student mobility study reflects Knowledge is Power Program Schools' understanding that students cannot learn if they do not remain in a stable learning environment for an extended period of time. Many current education policy enthusiasts are focusing on student mobility rates and the adverse effects caused by relocation from school to school at a frequent rate. Because KIPP wants to play a pervasive role in the lives of its students during their formative years of education, the schools want to minimize the relocation of

students as much as possible and do all they can to impact students' lives for the longest duration possible. By tracking student mobility rates across their schools, they are using the data to begin to understand the patterns and causes in order to assess possible solutions that will allow them to continue to serve high-needs children despite this barrier. The additional internal school reviews acts as a subsidy to the mobility study and the annual report card, going beyond student achievement rates to create a comprehensive evaluation of overall school health, including leadership and teaching assessments.

Aside from producing their own program reviews, KIPP draws on a number of independent studies that have produced evaluations on different program components. These reports use "original data drawn from quantitative and/or qualitative research" at KIPP School sites, offering a fresh and new look at achievement levels attained by Knowledge is Power Program schools. The results highlighted by these studies give KIPP administrators the opportunity to understand the strengths and weaknesses of their schools from an outside perspective and continually target areas for improvement. Allowing the results to be processed and interpreted by an independent resource avoids inside bias and gives a new take on what KIPP leaders may have overlooked during internal review procedures. Being conscientious of how their school performance measures up to the high expectations of these independent research teams give the schools a unique edge.   Armed with the knowledge necessary to incorporate the feedback into their flexible design, the schools continue to adapt to their students' needs.

The benefits of these rigorous evaluation methods are clearly reflected in the results produced by KIPP Charter Schools across the nation. Currently, 100 percent of KIPP eight grade students who remained with the program for four years performed above the district average for their grade level in both reading and math. Not only are KIPP students outperforming the district average, but they are excelling at advanced levels. These same eighth grade four-year KIPP scholars on average scored in the 82nd percentile in math and the 60th percentile in reading, propelling them into a high-achieving class despite the fact that many of these same students entered KIPP schools performing below-grade level only a few short years before. While the results seem to grow in proportion to the amount of time spent in the school, the first-year results also illustrate promising student achievement levels. After only one year at KIPP, two-thirds of fifth graders were out performing the district averages on state achievement tests. The success of these low-income students translates into promising and bright futures, with 95 percent of KIPP middle school graduates in 2007 entering into college-preparatory high schools and receiving millions of dollars in scholarships cumulatively. Because of their participation in KIPP, doors are being opened to these talented scholars that would have otherwise remained undiscovered.[20]

Both BELL and KIPP began by focusing their mission on bringing under-achieving low-income students to grade level. Today they teach the brightest minds among their students' peer cohort and have had little difficulty adopting their program designs to include challenging curriculum for these talented minds. If programs such as Bell and KIPP can not only maintain achievement levels, but drastically increase them over a short period of time, than other schools should have little difficulty adopting

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[20] KIPP Foundation. <http://www.kipp.org>

similar practices to fit the needs of students already performing at advanced levels across the curriculum.

Educated Program for Gifted Youth (EPGY)

    With roots tracing as far back as 1963, the Educated Program for Gifted Youth (EPGY) is the culmination of decades of research on computer-based learning from Stanford University. Unlike BELL and KIPP, from its onset the EPGY program has never contained provisions for students in want of remediation, but focuses exclusively on fulfilling the under-served needs of gifted learners. Its goal was to translate the adaptable technology provided by computers into active instruction on difficult subject material to a variety of students. The program began by developing lessons in mathematics and logic for elementary aged children of high academic ability. Since its inception, it has expanded to include students of all ages and disciplines, ranging from elementary school students to undergraduates and from English lessons to problems in advanced Physics. In 2001, EPGY was adopted to serve low-income high-achieving students who attend Title 1 Schools. That same year, EPGY held its first Summer Institute for high-ability students in Mathematics and Physics, expanding its services from the computer to the classroom. The residential program took place on Stanford's campus, and offered two-weeks of arduous class material to forty participants. Since then, the Summer Institute program has grown to include a variety of subjects over an extended period of time, offering students the opportunity to engage with advanced learning not only over the computer, but in a real college environment, providing them with supplementary education and an accurate glimpse into the future life of academia.

EPGY is "dedicated to developing computer-based multimedia courses in Mathematics, Physics, English, Computer Programming and other subjects, and making these available to students of high ability." The services offered by the program make advanced learning curriculum available to students of any background without taking them out of their normal learning environment, greatly expanding the opportunity of low-income students who are deprived of challenging educational subject matter during their regular school days. Crafted around the use of technology and computer-based learning, EPGY can create individualized programming that explicitly meets the needs of the students they aspire to serve. Currently, the Educated Program for Gifted Youth operates school-day computer programming for advanced students in 100 Title 1 partner schools. All of these factors feed into EPGY's four-fold mission:

1. Provide students with advanced courses regardless of where they live.
2. Do so without requiring them to leave their normal school environment.
3. Individualize instruction and accommodate individual differences in student learning.
4. Allow students to progress at their own paces and to accelerate their education.

Each of these goals illuminates the program's desire to cater to the individual needs of their learners. This flexibility gives EPGY scholars the opportunity to work within their own schedules and schools. The curriculum design is patterned after a regular class, but its computer-based nature takes away the need to accommodate difficult scheduling or after-school requirements that might not normally incorporate the needs of low-income young students. Generally, K-7 class work requires three 20 minute sessions per week, while secondary school students are expected to complete

five to ten hours per week on their individualized lessons. Some schools offer EGPY

virtual classrooms, which are incorporated into the schedule of the normal school day

and held at regular weekly hours. In order to become a participant in an EGPY

program, students must pass an aptitude test. Some standardized test scores are

accepted, while other subjects require a minimum performance on a specialized EPGY

written exam. Most scholars receive course credit from their schools; and in secondary

classes extending beyond the traditional "advanced" level, students receive Stanford

college credit, transferable to many other universities.

      The computer-based learning programs are designed to reflect a real

classroom as much as possible. Lessons begin with an animated lecture, simulating

what a teacher would normally write on a classroom chalk board while introducing the

important concepts of the day. Each lesson then asks students to complete offline

worksheets and reading assignments in a companion textbook. Inquisitive students can

send email questions regarding the material to Stanford faculty who will reply to their

specific inquiries like a traditional teacher. In this fashion, the programs are basically

designed to dispense a real classroom experience to a large audience for limited costs,

all the while providing individualized services that allow students to engage and

progress at their own pace, and engaging in challenging supplemental material to their

normal school day.[21]

Because the curricula are based on decades of cumulative research on

electronic-based teaching by Stanford faculty, it is no wonder that the programs are

effectively meeting the needs of the low-income high-achieving students that the

Educated Program for Gifted Youth serves. The subject material is continually updated

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[21] Educated Program for Gifted Youth. <http://epgy.stanford.edu>

and adapted to reflect changing student needs and has demonstrated effectiveness in augmenting the performance of students on California Standardized Tests. Research of Title 1 EPGY students confirms a positive correlation between their performance on EPGY exams and the state assessment test. Furthermore, test result comparisons among low socioeconomic students suggest that EPGY has been effective at selecting and targeting low-income high-achieving students who need supplemental instruction to perform well on the state standardized exam.[22] In essence, the program is raising the expectation bar on the achievement met by high-ability students in low-income schools across all grade levels. The relative newness of the program in Title 1 schools has prevented much further research on the positive results that the program seems to yield, but this research does suggest that advanced students are improving on state exams because of their interaction with the difficult curriculum material provided on a regular basis by the program.

The Human Development Organization: OPEN GATE Program

The Human Development Organization was found in 1997 on the principle that equality of education is essential to the maintenance of a healthy society. The organization saw the lack of gifted education opportunities to low-income students as one of these barriers toward equality of student success. In response, they founded OPEN GATE. OPEN GATE, based in San Diego, seeks to provide economically disadvantaged elementary school students with enrichment opportunities to turn at-risk students into future academic leaders. The program serves the brightest children in the

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[22] " How Well do EPGY Curriculum Variables Predict Student Performance on the California Standards Test?" Xuejun Shen, Edward Haertel and Patrick Suppes, April 08, 2005. http://epgy.stanford.edu/research/EPGYvsCSTReport_June05.pdf

low-income, at-risk student cohort by supplying them with daily one-on-one tutoring.

The tutoring services are provided by university student volunteers who undergo

specific training to prepare them for the responsibilities of their involvement with the

program. Furthermore, care is taken in pairing the student with a tutor from a similar

background or life-experience to insure that the program participants can receive a

comprehensive education and a love of learning that extends beyond the walls of the

classroom and into their community and family lives. After-school tutoring focuses

specifically on English literacy, but supplemental activities are provided in a wide range

of subjects, including art, music, poetry, theater, geometry, science and computers.

The tutors try not only to maintain and improve the bright students' academic ability, but

to instill in them a love of learning that will help them to see the intangible rewards of an

education. These lessons will help the students find greater degrees of intrinsic value in

scholastic participation than in the criminal or gang activities that permeate the

neighborhood cultures of OPEN GATE partner schools.

In addition to serving students, the Human Development Foundation also offers

partner classes to the parents of the children they tutor in order to foster a family

environment of education and love of learning. Named "Parent's PLACE," the program

offers evening instruction to parents on how to cultivate excellent study skills in their

children while simultaneously teaching them the same curriculum content that their

children are studying. This way, parents can take a proactive role in the lives of their

students by overseeing their study routines and assisting with homework problems on a

regular and informed basis. Furthermore, many of the children enrolled in OPEN GATE

tutoring come from families where English is not the first language. These cultural

differences can present barriers to parental involvement. By giving the parents an opportunity to engage in learning, hopefully this obstacle will dissolve and give the parents the chance for positive engagement in their children's schools. Extending the learning environment from school and into the home reinforces the positive associations of school and academics that will hopefully motivate the already exceptionally bright students to push their own limits and continue to strive for excellence in their academic endeavors.

Similar to those programs already discussed, OPEN GATE's program design relies on the synthesis of technology, training, and evaluation. The program partners with faculty at San Diego State University to ensure that their tutors are professionally trained and ready to provide positive utility to their students. OPEN GATE also relies heavily on technological innovations designed by San Diego Social Venture Partners to track student and tutor activities, measure results, and manage programmatic organization. The use of these innovative and collaborative community partnerships not only allows for OPEN GATE to offer customized services to all of their students, but has set them apart as a leader and model in gifted student education across the nation. Pooling resources allows for students to take advantage of the unique strengths of many community leaders who are in turn demonstrating an invested interest in the lives of the local students they serve. This reinforces OPEN GATE's mission to inspire change not only in academic performance, but in nurturing youth who will break away from the negative neighborhood characteristics of low-income living and follow a positive path towards a successful and constructive long-term lifestyle. The student

work produced by OPEN GATE participants reflects the success of these goals from a young age. One student, Angelique, age 8, wrote the following poem about who she is:

I understand I have to do chores
I say "I love chocolate"
I dream that I will be a singer
I try to be good in math
I hope I will be a smart and funny person
I'm curious and creative

This piece of work reflects that the child understands her responsibility and commitment to her family and home life, her ability to apply herself to school work, and her optimistic assessment of personal strengths. Each of these traits reflects the desires of the OPEN GATE program to build active community participants who show great academic and personal progress and potential.

Comprehensive evaluations of the benefits of student involvement in OPEN GATE are routinely provided by the San Diego State University College of Education. The most compelling evidence of the benefits of OPEN GATE enrollment is demonstrated by comparing these low-income students with their high-income high-achieving peers participating in regular gifted education programs operated by the same schools. Of gifted students from both cohorts, 71 percent of OPEN GATE scholars score above the 75th percentile on standardized tests compared with only 51 percent of regular program students identified as gifted. These results also carry across to reading, with 57 percent of OPEN GATE scholars and 45 percent of regular gifted children scoring in the top quartile. In fact, the studies conducted by SDSU have identified multiple strategies employed by OPEN GATE tutors that have proven to have

statistically significant positive impact on student academic improvement.

Consequently, the school district is now training public school teachers with these same

literacy techniques in order to provide similar academic stimulation to students not

directly receiving the OPEN GATE curriculum. These results are indicative of the

successful techniques harnessed by the Human Development Foundation in planning,

adapting, and executing their OPEN GATE program design to positively influence the

brightest minds of low-income San Diego youth.[23]

Building Educated Leaders for Life, Knowledge Is Power Charter Schools, the

Educated Program for Gifted Youth, and the Human Development Foundation's OPEN

GATE curriculum all offer exemplary models of what gifted education can mean for low-

income students across the nation. They all proclaim diverse missions and serve

diverse groups of student populations, but all four programs have found a way to meet

the needs of low-income high-achieving students despite their inherent differences.

Each program relies heavily on teachers that are directly trained to meet the program's

specific needs and on extensive evaluation to continue to provide the most cutting-edge

academic services to their students. Their commitment to education and the

unparalleled results these select programs have yielded should give policy makers,

parents, and students alike hope that our education system can be adopted to serve the

individual needs of every diverse student that enters through the classroom doors. But

as current conditions exist, too many bright and talented young scholars are missing out

on these services. The following sections will draw from my personal experience

working with these exceptional youth and offer concrete ways that we can make

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[23] Human Development Foundation. <http://www.humandevelopmentfoundation.com>

programs such as these a part of every school curriculum in the hope of an equal and

inspired future for every young American citizen.

IV. The Gesu Youngest Scholars Program

Program Foundations

Ultimately, researching challenges, analyzing data, and reviewing the practices of model programs are not comparable to spending time in a classroom observing and interacting with students. Practices may sound effective and efficient on paper, but the true test of a successful program is manifest by the children's receptiveness toward its design. In June and July of 2008, I engaged in teaching a five-week program for low-income high-achieving students that gave me the opportunity to observe first-hand some of the difficulties and successes associated with teaching students of this description. The experience allowed me to contextualize the problem in a broader urban setting. From the early planning stages, to child selection and program execution, my involvement added breadth and depth to my understanding of the barriers facing these children. Through elaboration on this experience, I hope to reconcile the lessons learned by model programs such as KIPP and EPGY with the practical implications of teaching in the classroom to arrive at workable guidelines for education policy.

Every good education program starts with caring, dedicated people and a good idea. Such was the birth of the Youngest Scholars program at the Gesu School. Gesu is an elementary school situated in the economically depressed neighborhood of North Philadelphia. Four hundred and fifty students attend the school in grades pre-Kindergarten through eight. It serves primarily low-income African American students from the vicinity. In fact, over 70 percent of their students qualify for the free or reduced lunch program. Gesu began as a parish school in the early 1900s, catering to the

predominantly Catholic population of the flourishing Gesu Parish. Following the

economic decline of the Great Depression, North Philadelphia experienced slow

deterioration that lasted for multiple decades until finally the parish was forced to close

in 1993. However, the compassionate faculty of the Gesu School did not wish to close

the door of opportunity on the many area children they served. Rather than relocate the

students when the parish closed, Gesu found funding from private supporters and

remained open as an independent school. Today, it maintains its Catholic affiliation

while operating outside the Archdiocese as an independent institution of education.[24]

Before the onset of the Youngest Scholars program, the Gesu School was

already heavily invested in maintaining levels of outstanding achievement by all of their

students and providing them with extensive enrichment opportunities. These

elementary school students go on to graduate high school at a rate of 90 percent

compared with the neighborhood total of 50 percent. In 2008, every member of their

graduating eight grade class enrolled in a program of further education ranging from

highly selective preparatory high schools to vocational programs.[25] The dedicated staff

at the Gesu School and their 50 plus member Board of Trustees is always looking for

innovative ways to expand the opportunities available to their students. Already the

school ran a summer program called "Young Scholars" for their brightest sixth through

eighth graders and other talented middle school students from surrounding area

schools. The desire to extend this opportunity to their younger students led to the

design and implementation of the Youngest Scholars program in the summer of 2008.

The idea was originally broached by Dr. John DiIulio after he completed extensive

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[24] Footlick, Jerrold K. *A Model School: How Philadelphia's Gesu School is Remaking Inner City Education*. Villiger Press, Philadelphia, PA, 2004.
[25] The Gesu School. <http://www.gesuschool.org>

research on low-income high-achieving youth in partnership with Civic Enterprises and the Jack Kent Cooke Foundation. As a trustee of the Gesu School, he saw the perfect opportunity to put his research into work at a school prepared to take on the additional program and positively impact the lives of its youngest and brightest students. Immediately a team was assembled and the project got underway.

With the collaboration and direction of the school principal, president, and one of their most experienced teachers, we went to work developing a curriculum for the Youngest Scholars. For logistical purposes, the program would run simultaneously with the established Young Scholars—meaning it would run daily from 8:30 am to 2:30 pm for five weeks. With the schedule determined, we began to fill in the nuts and bolts of the daily schedule for members of the Youngest Scholar's inaugural class. The staff agreed that we wanted to create an atmosphere of learning different from a normal school day, but still emphasizing the progression of core skills such as reading, math and critical thinking. With these concepts in mind, we decided to build the activities around a thematic element, encouraging the students to make connections across activities and engage in continuous reinforcement of the concepts they learned on a daily basis. After long lists and much debate, we decided on four weekly themes: Nutrition, Colonial America (to span two weeks), the Ocean, and the Summer Olympics.

Each theme was an attempt to connect the children with their culture or environment and increase their interest in the scholastic material based on the content. The program would begin with 'Nutrition Week.' The Gesu School provided breakfast and lunch to all of the program participants on a daily basis. We hoped to teach the children about making healthy food choices and getting exercise so that we could

continue to incorporate healthy snacks and activities into the daily schedule for the duration of the summer. Sets of enrichment activities would also reinforce these concepts, such as a hands-on cooking afternoon and healthy snack stations. Following the Nutrition unit, the students would engage in a two-week theme: Colonial America. Coinciding with the 4th of July, the students would engage with their Philadelphia history, by learning about important events that transpired in the region during the Colonial and Revolutionary time periods, while also discovering what it would be like to be a child of their age during this time. We planned to have a visit from a Colonial reenactor and allow the children to use their creative skills to put on a play depicting the events they had studied. After the long and intensive historical unit, we decided to lighten up the program and introduce a fun, summer theme—the Ocean. We planned to study ocean life and the beach. The children would make an ocean-themed art project and do independent research projects on sea creatures of their choosing. To conclude the five weeks, the students would embark on a study of the 2008 Summer Olympics and Beijing, China. We hoped that after learning about some of the events and the surrounding area the children would be able to watch the upcoming trials in a new light, with deeper appreciation of the athleticism and the cultural significance of the Chinese setting and the Olympic tradition. At the end of the week, the children would compete for prizes in an Olympics of their own.

Child Selection Process

With the basic outline of the program established, the next step was choosing which students to invite to participate. Because the Young Scholars program began in grade six, we chose to focus on younger students in hopes that the Youngest Scholars would serve as a gateway program, feeding into Young Scholars the following year. Therefore, Youngest Scholars would serve grades three through five. Colleen Comey, an experienced Gesu teacher, would serve as the instructor for the program, and I would assist. With only the two of us to oversee the scholars on a daily basis, we settled on a target class population of 25 students. The participants would be invited from the three grades based on the previous year's Grade Point Average, Terranova Standardized Test scores, and for the current second and third graders, Dibels test results. After the brightest students were identified, those not qualifying for Free or Reduced Lunch would be disqualified from participation and the next low-income student on the list would take their place. As we set to work recovering data based on these criteria, we realized limitations of the selection design. Unfortunately, the school did not have accurate information on which students were receiving Free or Reduced Lunch. As we compiled the test data, the school principal, eager to fill the spots, extended invitations to the students that she felt fit the definition based on her own discretion and the recommendation of classroom teachers. Thus, our 25 participants were selected.

Retrospectively comparing those selected with the testing data, many of the students fit nicely with our definition, but there were also some outliers that did not seem to match with the stated requirements of the program as well as some excluded

students that appeared to be wonderful candidates. The following charts illustrate the

ranking of each program participant compared to their classmates from the same room.

Using the rankings as a standard is the most effective way to select for this program

because there were a specific number of students we wished to invite. Therefore,

rather than setting a minimum criteria and inviting all students that met the

specifications, we had planned to make decisions based on comparing achievement

levels to students of the same age and class. These results illustrate the standing of

the 22 students who ended up attending the program on a semi-regular basis.

GRADE TWO (Rankings based on class size of 23 students)

Participant	GPA Ranking (1=highest GPA)	Terranova Ranking (1=highest score)	Dibels Ranking (1=highest Score)	Income Ranking (1=highest income)
A	2	8	2	18
B	4	3	4	13
C	6	5	12	17
D	12	9	6	20
E	17	10	3	23

As illustrated by this graph, the rankings of certain individuals are in the bottom portion

of the class in distinct categories. For example, student E rated low in comparison to

her classmates in GPA and Terranova Scores, yet she was one of the best achievers

on the Dibels Test and had the lowest income of her class. Meanwhile, a student who

was not selected for the program scored in the top six of the class in every achievement

category and fell into the bottom half of the class in income level, yet was not invited to

participate. Such discrepancies reinforce the process of selection bias as previously

discussed. The selection for other grade levels demonstrated similar results.

GRADE THREE SELECTION POOL A (Rankings based on class size of 22 students)

Participant	GPA Ranking (1=highest GPA)	Terranova Ranking (1=highest score)	Dibels Ranking (1=highest Score)	Income Ranking (1=highest income)
A	1	5	2	21
B	5	4	7	19
C	11	6	4	17
D	18	16	8	15

Student A exemplifies a perfect candidate for the program. She scores in the top five of

her class in every category while coming from one of the lowest income levels.

However, participant D seems to have been selected in error. Of those selected she

has the highest income while consistently scoring in the bottom half of her class on

achievement standards.

GRADE THREE SELECTION POOL B (Rankings based on class size of 27)

Participant	GPA Ranking (1=highest GPA)	Terranova Ranking (1=highest score)	Dibels Ranking (1=highest Score)	Income Ranking (1=highest income)
A	1	5	3	17
B	3	2	1	15

Both of these scholars seem to be wonderful candidates for the program, yet only two

participants were chosen from this selection pool, compared to four from the smaller

third grade room.

GRADE FOUR SELECTION POOL A (Rankings based on class size of 21)

Participant	GPA Ranking (1=highest GPA)	Terranova Ranking (1=highest score)	Income Ranking (1=highest income)
A	2	8	16
B	3	5	17
C	5	6	14
D	7	4	7

GRADE FOUR SELECTION POOL B (Rankings based on class size of 24)

Participant	GPA Ranking (1=highest GPA)	Terranova Ranking (1=highest score)	Income Ranking (1=highest income)
A	2	3	4
B	3	2	11
C	4	5	14
D	5	6	15
E	8	7	21
F	11	10	16
G	19	13	17

Again, it is interesting to note that nearly twice as many participants were selected from classroom B than classroom A in the fourth grade age cohort. Students such as F and G do not appear to have competitive enough scores to merit their entrance into the program. All of these numbers illuminate the extreme difficulty in identifying who qualifies as a low-income high-achieving student and how a program with limited capacity for service will be able to properly identify the best participants. The selection error in some of the students chosen for the first class of Youngest Scholars probably influenced certain dynamics of the program for the entirety of the five weeks.

Lessons Learned

With the program designed and the participants identified and selected, the first run of the Youngest Scholars began. In a typical day, students would arrive at 8:30 am, and then eat breakfast and read silently until all of their classmates had arrived. From 9:00 - 11:15 am, the scholars participated in instruction. Divided into four peer groups, the scholars rotated between stations during this time. Two of the groups were engaged in direct instruction provided by myself and Ms. Comey, while the other groups engaged in independent learning exercises until each group had rotated through each station. From 11:15 to noon, the students had group exercise and gym time, followed by a half hour lunch period. From 12:30 – 2:15 pm the students again engaged in instruction of some kind. The activities varied from time in the computer lab to group projects or reading comprehension exercises. At 2:15 we began to prepare for a 2:25 pm dismissal. Some of the students were able to go home at that time, while others

joined peers from the Young Scholars program and the Gesu Summer Camp in an after-school care program until their parents were able to take them home.

Unfortunately, because of the newness of the program, no statistical comparisons can be done to assess whether or not this program's design positively impacted the lives of the participants. A comprehensive data analysis will occur once this class of Youngest Scholars progresses to higher grade levels. In the meantime, even without tangible data analysis, the experience on the ground has yielded many qualitative results that offer suggestions for program improvement. The 24 days of the program were characterized by highlights and lowlights that will influence structural changes in future trials of the Youngest Scholars. These lessons break down into two categories: those to be replicated and those that should be removed from the program to insure maximal impact in the future.

Three aspects of the program's design yielded positive feedback from the students and instructors; primarily, the combination of group and individual work, the split daily time between traditional instruction and enrichment based activities, and the use of themed curriculums. One of the original goals of the Youngest Scholars program was to create a learning environment that was distinguishable from a normal school day, yet still reinforced concepts learned during the school year to help increase academic performance and combat the effects of the summer learning gap. Allowing the students time to work collaboratively in groups as well as on individual projects helped create just this type of environment. According to Sister Ellen Covey, the principal of Gesu School, many of the students they serve have difficulty working cooperatively. Throughout the duration of the program, I was able to observe the

limitations of the scholars' peer communication skills and willingness to help one another on even the simplest tasks. For example, one afternoon four of the boys were playing Monopoly during free-time. As they played, they munched on individual bags of Chex Mix they had received on a fieldtrip earlier in the day. One bag fell on the ground, spilling its contents under the table where they were sitting. Immediately they started to blame one another for the accident. Two of the boys came to me, each blaming another member of the group and insisting his own innocence. I told them that it was just an accident and no one was in trouble. They needed to be careful in the future and all four of them should pitch in and help clean up the mess before they resumed their game. Rather than cooperatively joining in the cleaning process, all four children grew defensive and stubborn. Each group member insisted that he should not be responsible for cleaning up a mess that he did not directly cause, while none of them owned up to the mistake. Completely outside of any academic context, this example reveals the students' inherent stubbornness and resistance toward making sacrifices on behalf of their peers. Because of these attitudes, group work of any kind presented interesting barriers and challenges. However, fostering a collaborative spirit in the students during these young and formidable years proved to be a very important component of the program that allowed them the unique opportunity to work and grow together unlike the structure of their regular school days where work is almost exclusively individual. However, it was also important to allow the students time for individual expression. Research suggests that gifted students in particular enjoy working alone rather than in groups.[26] Especially because Youngest Scholars served

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[26] Learning Point Associates. "Traditional Learning Environments That Emphasize Fragmented Knowledge and Basic Skills." <http://www.ncrel.org/sdrs/areas/issues/educatrs/leadrshp/le4frag.htm>

students of three different grade levels, time to challenge the students based on their own ability level needed to occur in order to push the students to their individual limits. In this way, the group and individual work components of Youngest Scholars was a very important part of the program that helped insure the design was structured to meet program goals.

Similarly, the breakdown of individual work time or enrichment activities and direct instruction helped to reinforce work habits and learning skills that will be applicable to the students both inside and outside of the classroom for years to come. The Youngest Scholars wanted not only to teach students more advanced subject material, but develop personal skills and academic traits that would contribute to higher orders of thinking and help develop a professional tool kit for the students to draw from for the remainder of their academic careers. During this program, direct instruction would introduce important concepts for the students to think about. Then, during individual rotations, the students could apply what they had learned in new and creative ways and interact with the material in a way unlike a traditional classroom. Many of the projects called for a creative and artistic side to collaborate internally with the academic analysis of subject matter to create comprehensive individual projects that challenged the students' previous associations with scholastic material. For example, during the Summer Olympics unit the students were asked to create travel brochures for tourists visiting Beijing. They had to use their math to research flight and hotel prices, historical analysis to explain the significance behind popular tourist attractions, and persuasive skills to convince travelers of the benefits of a Chinese vacation. All of these skills were applied using an artistic design in a format much different from the traditional

worksheets and essays that may normally reinforce these skill sets. Additionally, the children could have fun engaging with the academic material. Using these critical thinking skills is important in the early stages of elementary education and was a valuable part of the Gesu Youngest Scholars experience.

Finally, the themed unity of the weekly lessons helped to motivate the scholars to adopt active and inquisitive attitudes towards the material. While particular students approached different themes with varying levels of excitement, overall the common thematic thread tying together the academic concepts of the week allowed the students to fully immerse themselves in the content. Each new activity gave students the opportunity to draw from the knowledge base they had accumulated on the topic throughout the week. With this continuity and preparation, scholars could bring new creativity and confidence to their weekly projects. They were able to enthusiastically share what they had learned and relate it to personal experiences. Each day the students were asked to write a journal entry detailing their favorite activity from the day before. Often times, these entries reflected an interesting fact that they had researched. One afternoon during free time, a student wrote out a short story entitled "Ben Franklin" and brought it to me. It read:

> I am Ben Franklin. I cannot resist (sic) without my
> ideas. Many of my ideas were about science. I
> invented the lightening rod, bifocals, and the
> Franklin stove. I also thought of new political
> ideas. I signed the Declaration of Independents.
> That's how my life was.

This piece of work, generated unsolicited by a rising third grader, reflected the amount of information the students were learning and how they conceptualized the importance of historical figures or other content they studied during the week. The desire to prove their mastery of the material, despite the lack of required tests or grades associated with their ability to recall such details, demonstrated that they were genuinely excited about deepening their understanding of the subjects. Part of the program's purpose was to encourage skills of life-long learning and enhance the inquisitive nature of these young scholars to propel them toward further academic endeavors. The themed nature of their studies helped us to achieve this goal.

Despite these positive results, the Youngest Scholars program also presented some barriers that may have impeded the ability of the students to grow us much as possible over the five weeks. Chief among these obstacles was the length of the school day, the selection criteria, and the student faculty ratio. The name "Youngest Scholars" is in itself illuminating. Particularly for the rising third graders, the 8:30 am to 2:30 pm schedule was a lot to demand of them for five weeks. The majority of behavioral problems arose in the afternoons when the kids began to grow restless and their attention spans began to wane. Additionally, the students did not want a summer experience that felt like a normal school day. Most elementary students spend the concluding weeks of the school year anxiously anticipating a summer vacation of no responsibilities and worries. Instead, these students were asked to return to the classroom for five long weeks. Rather than embracing the opportunity to use their days productively as active learners, some of the young students felt they were almost being punished rather than rewarded for their excellent academic aptitudes. In fact, one of the

brighter students left the program before it ended to attend a different summer camp.

She claimed that the Youngest Scholars felt "too much like school." To create

enthusiastic learners, the participants must look forward to attending the program rather

than viewing it as an obstacle to their summers of fun. Perhaps if the program ran for a

shorter duration during the day and incorporated more unique experiences, such as

fieldtrips not included in the general school year, the scholars would more

enthusiastically engage in the entirety of the program.

The dilemmas associated with selection criteria have already been briefly

discussed, but merit some further elaboration. Originally, we had decided to base

selection for the program on test scores and income level. Although some participants

were not chosen based on these raw numbers as previously detailed, the events of the

program suggested that a behavioral element should be included in student

identification. During group activities, independent projects, and direct instruction alike,

the repeated misbehavior of a few select students constantly limited the activities of the

other class members. I was surprised by the recurring behavior of a few students who

consistently sought out ways to disrespect or harm their peers. At times, planned

enrichment activities had to be canceled because of the inability of these students to

stay on task. Students of this disposition have no place in a program designed to create

a positive atmosphere of higher level learning. Future versions of the Youngest Scholar

program should reserve the ability to remove these students from the program after a

week-long trial run or should pre-select based on an established behavioral criteria.

Distracting teacher attention from the students ready to actively participate because of

behavioral digressions cause the gifted and enthusiastic learners to receive less of what

they need similar to the regular school year. An enrichment program should not also run the risk of ignore the most talented and eager students.

Finally, the teacher-student ratio of the Youngest Scholars program was much too high. With only two teachers split between 22 diverse learners, students could not receive the individualized attention they necessitated to optimize their learning experience. In order to foster collaborative learning and create individualized learning plans, each child needs more interaction with a teacher or program volunteer. Also, the diverse age range made it difficult for myself and Ms. Comey to effectively teach lessons of appropriate ability levels to the group as a whole. Splitting off the pre-third graders into a separate unit and giving more faculty support to both groups would allow the students to truly engage in an academic environment where they receive the attention their skills merited and find appreciation from the rigor of their academic efforts. In future versions of the Youngest Scholars, these concerns should be taken into consideration in order to create the best possible learning environment for properly selected participants.

The five week trial of the inaugural class of the Youngest Scholars at the Gesu School afforded rewarding successes and trying struggles. From its conception to its conclusion, every member of the team learned valuable lessons that will hopefully shape future versions of the program and contribute to the school's desire to create a challenging and fulfilling learning environment for each of its students. But these valuable lessons should not only be limited to the North Philadelphia students fortunate enough to take advantage of these resources. It is the responsibility of our country to see to it that every child is afforded equal access to the best learning opportunities that

our schools can provide. If the experience of low-income high-achieving students is not improved, schools across the nation will continue to hinder the talents of some of Americas best and brightest. The experiences and studies generated by established programs and fledgling endeavors alike need to be harnessed into a comprehensive plan for real education reform.

V. Conclusion

The United States' education system needs to take drastic steps toward remedying the inequalities perpetuated by existing legislation and program designs. Current research has begun to illuminate the previously overlooked obstacles stacked in front of the low-income high-achieving student. Likewise, select practitioners have developed limited programs to attempt to conquer these challenges. However, the minimal efforts discussed throughout this paper have done little to perpetuate the real change necessary to allow these scholars to flourish to the utmost of their capabilities. In order to initiate the change these students need, researchers, practitioners, and legislators alike must work in concert with one another to create a comprehensive plan covering each component of the complex problem.

Existing research available on this student population produces thorough evidence that low-income high-achieving students do fall off of the high-achieving track at a much higher rate than that of their high-income peers. The research does not, however, present conclusive statistics on what works to remedy this problem. Now that the challenge has been identified, researchers need to shift their focus towards locating and explaining the variables responsible for perpetuating the system biases. By isolating and confirming the specific factors that produce this limiting school environment, practitioners can begin to use the research in meaningful applications. A comprehensive study involving the diverse practices of different schools and their correlating test results would be an appropriate place to start. By examining the unique teaching styles of successful urban schools, such as KIPP Charter Schools, and contrasting their practices with urban schools currently failing their low-income high-

achievers, clear variations will illuminate concrete and actionable ways to improve education across the board.

A research project of this breadth and scope will take a talented team of individuals working across a broad area for many years. Because the research is dependent on student achievement levels over time, conclusions cannot be reached in a short-term time frame. In the meantime, schools cannot continue to ignore these valuable scholars and allow their talents to remain untapped. Therefore, solutions need to be implemented immediately based on the available research and the limited experience of the lessons learned by those individuals who have begun to work with the low-income high-achieving student population. The four programs featured in this study, Building Educated Leaders for Life, Knowledge Is Power Program, Educated Program for Gifted Youth, and OPEN GATE, all share similar characteristics that practitioners should implement into their program designs. First, each program uses extensive systems of evaluation to monitor the progress of every student and reevaluate the pieces of their curricula. By tracking student performance to this degree, educators can be more aware of the impact associated with their teaching methods and more in tune to the individual needs of every learner. The four programs also all use their own teacher training methods. By educating the teacher within the design of the program, teaching accountability standards are raised and the program directors are able to allow the teachers more flexibility and control in the classroom. By holding teachers accountable for the growth of every student as an individual, they will naturally see their role in a new way. Rather than seeking to meet subjective standards that exclude the high-ability students, teachers will be rewarded for maximizing the ability of each pupil.

Particularly when designing a program for the specific needs of low-income high-achieving students, teachers will be able to approach the material in a new and unique way contrary to traditional classroom jobs. Just as teachers should be held more accountable, so should the students. As illuminated by the rigorous standards of KIPP Charter schools, holding the student accountable to a high degree of expectations with no excuses automatically demands a more rigorous approach to academic learning. Selecting the best and the brightest and giving them a programmatic outlet to flourish will reinforce their ability and motivate them with challenging and rigorous work. At the same time, the program should contain elements of enrichment and other activities that the children are not exposed to during the duration of a normal school day. Affording the students extra opportunities will increase their love of knowledge and reinforce their success with positive feedback.

Along with the other components discussed in the preceding sections of this paper, such as child selection and curriculum content, the basic skeleton of an appropriate program design exists for practitioners to begin implementation into their schools. However, without proper empowerment from legislative action, even those educators with the strong desire and motivation to give every opportunity to their low-income high-achieving students may be powerless. A lot of the necessary steps required by the government to insure that every child receives a quality and challenging education have already been taken; unfortunately, the legislation has not been adequately enforced. For example, the Jacob K. Javits Gifted and Talented Students Education Program funded by the federal government, offers grants to conduct research

or implement innovative strategies to meet the needs of gifted students.[27] No Child Left

Behind proclaims its dedication toward closing the achievement gap and eradicating the

"separate and unequal" school systems of the past.[28] However, with the focus placed on

Adequate Yearly Progress and meeting minimal standards to secure school funding, the

legislation continues to ignore the needs of the nation's high-achievers. In order to fully

address the problem and provide the impetus for change, legislation must specifically

provide for the needs of low-income high-achievers and hold teachers accountable for

their growth.

The standards of accountability in No Child Left Behind are an admirable

beginning toward challenging schools to achieve results. However, the standards of

measurement are in desperate need of reform. Creating individualized programs of

learning and insuring that growth occurs consistently across ability level will allow the

teachers the flexibility that they need and desire. At the same time, as schools strive to

maximize each student's potential, the door will open for more low-income students to

rise into the top academic quartile rather than falling out of the high-achieving group like

current trends. KIPP and BELL have already demonstrated that the design of their

programs has the power to move under-achieving students into the ranks of their most

successful peers. Legislative action to further student accessibility to gifted and

enrichment programs would only serve to guarantee the success of all students.

Education is a responsibility. It is the responsibility of the government to provide

equal opportunity to students of all backgrounds and ability levels. It is the responsibility

of the nation's teaching force to receive the education they need to be able to

[27] U.S. Department of Education. <http://www.ed.gov/programs/javits/index.html>
[28] U.S. Department of Education. No Child Left Behind.
http://www.ed.gov/nclb/accountability/achieve/nclb-aa.html

appropriately serve the unique learning needs of each of their students. It is the

responsibility of education researchers to bring to light the most difficult problems facing

education inequality and help find workable and proven solutions. Working together

and holding themselves to high levels of accountability, teachers, legislators, and

researchers can reshape the education system to guarantee that the nation's brightest

low-income students receive the opportunity they deserve. Together, they can unlock

the hidden potential of educational capital that will move the nation forward.

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