# SUCCESSFUL AFRICAN-AMERICAN MATHEMATICS STUDENTS IN ACADEMICALLY UNACCEPTABLE HIGH SCHOOLS 

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#### Abstract

This study sought to determine the reasons why successful mathematics students have been able to thrive in schools labeled academically unacceptable and why they have chosen to stay in these academically unacceptable schools despite having the option to leave. Qualitative methods including group interviews, individual interviews, and open-ended questionnaires were used to address the above issues. The study involved successful mathematics students, and their mathematics teachers and principals from two high schools deemed academically unacceptable. Results indicate that students attribute their success in mathematics to good teachers, and personal character traits (ability to focus, desire to succeed, determination, curious/inquisitive nature, and overall belief in self). Participants chose not to attend better performing schools because they feel comfortable at their current school, and have developed a degree of trust at their current school. Moreover, the participants believe that graduating from a school with problems such as those associated with academically unacceptable schools will better prepare them for the "real world." Educators and those who aspire to improve low-performing schools must pay heed to the advice of those students who have experienced success in low-performing schools in order to avoid exacerbating mathematics ineptness in such schools.


The current era of educational accountability has been dubbed a dark period in American education for a significant segment of the minority population (Kohn, 2000). For African-American students attending inner-city schools it has been particularly sinister. Spurred by the requirements of the No Child Left Behind Act ( $N C L B$ ), state accountability systems have disproportionately subjected inner-city schools and its students (most of whom are African American) to its callous repercussions: repercussions which include publicly identifying low-performing
schools in the media. Steele (2004) asserts that the consequences from failure to meet accountability goals (specifically testing) consistently contributes to dropout rates among African Americans and puts their lives on a course of restricted opportunity. Drug and alcohol abuse, high crime rates, incessant violence, and extreme poverty are just a few of the negative environmental factors that create even more challenging educational circumstances for inner-city schools and their surrounding communities (Dandridge, Edwards, and Pleasants 2000). While it is obvious that
"these schools need help desperately," preliminary evidence indicates states and districts are frequently slow to aggressively improve or overhaul failing schools (American Federation of Teachers, 1999; Brady, 2003).

Nonetheless, there are pillars of success in low-performing schools that are frequently overshadowed and perhaps unknown to the public. Most conspicuously unnoticed are high-achieving students in mathematics. Few would disagree with the conjecture that mathematics has been the proverbial Achilles heel for students attending low-performing schools; therefore it seems appropriate to make the central focus of this study those students who stand out academically despite the dreadful conditions present in their school and community. Accordingly, it is an objective of this study to contribute to the limited research associated with state-designated poor schools and high-achieving African-American mathematics students attending such schools. This study chronicles such students' journeys by examining the following questions:

1. What are the reasons why successful mathematics students have been able to thrive in academically unacceptable schools?
2. Why they have chosen to stay in these academically unacceptable schools despite having the option to leave for a better performing school?

## NCLB and Louisiana's Accountability System

By virtue of the Tenth Amendment to the United States Constitution, the feder-
al government yielded jurisdiction over public schools to individual states. This formality notwithstanding, the U.S. federal government has flexed its financial muscle over the years to dictate the manner in which states operate their public schools. Rose (2004) indicates that "NCLB moved the federal effort to influence schools to a new and higher level more aggressive, focused, and directive (p. 121)." This new legislation promises an important shift in efforts at all levels to improve the quality of public education (Rittner \& Lucas, 2003). NCLB seeks to close the persistent achievement gap through a multifaceted and comprehensive approach that is based on accountability for results; an emphasis on doing what works based on scientific research; expanded parental options; and expanded local control and flexibility (Thompson, 2002; US Department of Education, 2002).

In addition, NCLB requires states to publicly identify low-performing schools. Furthermore, those schools identified as poor performing, are required to offer students the option of attending higher performing schools through the school choice mandate. School choice policies were upheld by the US Supreme Court in 2002 and hailed by the US Department of Education as "perhaps the most important education decision (by the Supreme Court) since Brown v. Board of Education" (Thompson, 2002; US Department of Education, 2002a).

Even though the NCLB legislation requires schools nationwide to have rigorous systems of accountability, individual states do have some autonomy in designing and implementing such systems. One
of the most acclaimed states in the country for its accountability system is Louisiana; yet the Annie Casey Foundation, which produces the annual Kids Count report, rated Louisiana 49th of 50 states for child well-being as measured by education, health, and economic conditions (Associated Press, 2004). Thus, it seems appropriate to investigate successful students under Louisiana's accountability system, which has high standards for students despite the overall poor welfare of its students.

The state of Louisiana, one of the poorest states in the nation, has been consistently ranked near the bottom on almost every national measure of academic performance (Council of Chief State School Officers, 2003). Nonetheless, it was among the first states to comply with the accountability requirements of NCLB. After making modifications to its original plan to comply with NCLB, Louisiana has been lauded for its accountability system. The state now ranks first in the country for its efforts to improve school and student performance, and first for its efforts to improve teacher quality (Louisiana Department of Education, 2005; Education Week, 2005).

A major component of Louisiana's accountability program provides the public with annual School Report Cards and School Performance Scores (SPS). High school SPS are generated from student performance on criterion-referenced tests, norm-referenced tests, attendance, and dropout rates. The Graduate Exit Exam for the 21 st century (GEE) a criterion-referenced test, makes up sixty percent of the SPS. The Iowa Test of Educational Devel-
opment, a norm-referenced test, makes up thirty percent, while attendance and dropout rates account for five percent each. The GEE is considered "high stakes" because it makes up 60 percent of the SPS, and all students must pass it before receiving a state endorsed high school diploma. In 2003, forty-nine percent of AfricanAmericans taking the mathematics GEE for the first time failed the test. In 2001 \& 2002 , the failure rate exceeded fifty percent.

If a school's SPS is below 60.0 (effective 2005, formerly 45.0 ) the school will be labeled an academically unacceptable school. If the school is labeled academically unacceptable, students have the opportunity to leave the unacceptable school for a better performing school. In essence, the students will then have the option of exercising their school choice right. The US Department of Education (2002b) affirms, "the beneficiaries of school choice are overwhelmingly minority, typically Black students."

Accountability also affects students individually. Each student in Louisiana receives a report from the Louisiana State Department of Education which labels their performance as Advanced, Mastery (formerly Proficient), Basic, Approaching Basic, or Unsatisfactory (this is in contrast to the pass/fail distinctions given to students who took the graduate proficiency exams of the 1990's). A student receiving an Unsatisfactory score on the GEE must retake the test until it is passed. If the student does not reach a passing score he/she will not receive a state endorsed high school diploma. Horn (2003) pointed out that high stakes testing may increase the
number of students leaving high school without a diploma.

At the time of this study, seventy-five schools statewide were labeled academically unacceptable. Ironically, even at these schools, which are primarily innercity schools in large urban school districts with majority African American population, there are some students who have been academically successful in mathematics. For the sake of this study, successful students will be defined as those students who scored at the Advanced or Mastery level in mathematics on the GEE. In 2003, only six percent of African-Americans scored at the Advanced or Mastery level in mathematics on the GEE (Louisiana Department of Education, 2003).

## Related Literature

Being African American in the United States has been described as a major disadvantage for an individual (Bankston \& Caldas, 1996). It is also a common finding that schools and school districts enrolling predominantly minority students tend to score lower on standardized educational achievement tests than those enrolling predominantly non-minority students (Sireci, Deleon, \& Washington, 2002).

Horn (2003) found that non-White, nonAsian students, as well as students with special needs and English as a Second Language (ESL) learners, are among the groups that are adversely affected by state mandated high stakes tests. Furthermore, African Americans have been greatly underrepresented among the highest scor-
ers on standardized tests (Horn, 2003). Townsend (2002) states that at the heart of many standards-based school reform initiatives are disastrous academic outcomes experienced by African Americans, Hispanics, and impoverished learners as measured by standardized tests. No matter how mathematics achievement and persistence is measured, African Americans seem to lag behind (Martin, 2000).

Milner (2002) suggests that AfricanAmerican high-achieving students face several challenges, including under-funded schools with meager resources, emotional and psychological distress as brought upon by peers and societal perceptions, exclusion and isolation, and powerlessness. Likewise, Steele (2004) indicates that African-American students in inner city schools are more likely to: a) be taught by uncertified and poorly trained teachers; b) experience corporal punishment and suspensions; c) encounter an especially distracting peer culture in junior high or high school; d) be tracked into lower academic and special education classes than other students; and e) go to schools with few or no Advanced Placement courses.

Furthermore, African Americans from low income families must also endure the cumulative effects of exposure to community violence, poverty, racism, oppression, and other forms of abuse (Jipguep \& Sanders-Phillips, 2003). Lad-son-Billings (1998) points out students of color are often misrepresented as having "dangerous minds," instead of more aptly being associated with living and learning in "dangerous times."

Despite the presence of ominous cir-
cumstances, there exists a select cadre of African-American students who find ways to rise above the aforementioned adversities. Maton, Hrabowski, and Grief (1998) found that high levels of parental academic engagement, strictness, nurturance, and community connectedness collectively appeared to counteract the negative contextual influences of neighborhood, peers, schools, and society. Martin (2000) had similar findings pointing out that family and teacher support, individual goals, and the need to help others through community service were all contributors to mathematics success of African-American students. Tucker, Herman, Pederson, Vogel, and Reinke (2000) found that AfricanAmerican students believe keys to their academic success include (1) academic preparation and active participation in class, (2) positive peer influences in promoting academic success, and (3) praise and encouragement by teachers and parents.

The emergence of accountability systems, which make unacceptable schools known to the public and allows for school choice, provides a strong incentive to reinvestigate mathematics achievement of African-American students in low performing schools. Further, over a century ago there existed considerable disparities in nearly every aspect of education from achievement to facilities. Similarly, the present profile of educational opportunity for a significant segment of African-American children mirrors that of the early 20th century; predominantly Black and minority schools are most often housed in crumbling facilities, suffer from starved budgets, and lack essential resources (Sul-
livan, 2004). W.E.B. Dubois, an early 20th century philosopher, proposed that academically elite students ought to be central figures in overcoming such obstacles; he often referred to this group as the Talented Tenth. Dubois (1903) stated "The Talented Tenth must be made leaders of thought and missionaries of culture among their people. No others can do this work... [This society] is going to be saved by its exceptional men." DuBois' conjecture provides a noteworthy justification for this study to focus on successful mathematics students who are conceivably among today's Talented Tenth. Thus, they are likely to contribute to solving some of the enigmas associated with African-American students' deficiencies in mathematics. Moody (2000) states "much can be learned from those African-American students who have been successful with school mathematics. Listening to success stories has the potential to create dialogue among mathematics educators about particular factors and schooling practices that contribute to the success of African-American mathematics students. [These success stories] can help us explore ways to improve the mathematics education and ultimately the mathematical experiences of AfricanAmerican students (p. 51)."

## Method

Given that this investigation attempts to 1) gain a descriptive understanding of how the participants triumph over the perceived obstacles embedded in low performing schools and 2) obtain perceptive explanations as to why to they chose not to attend better performing schools, a
qualitative approach is appropriate. Two schools from Urban Independent School District (UISD) were selected for this study, Lake High School and River High School (pseudonyms). The Louisiana Department of Education labeled those schools academically unacceptable based on their SPS. In Fall 2004, Fifty-four of the seventy-five academically unacceptable schools in the state were located in UISD. Lake High and River High were among the few high schools to enroll at least five successful African-American mathematics students. Moreover, the above high schools were idealistic for this study because they were lauded for exemplifying significant academic improvement even though the schools are considered academically unacceptable. The state recognized both schools for their efforts to improve by bestowing upon them the "Recognized Academic Growth" label. This perhaps personifies the baffling nature of accountability systems.

Finally, a total of sixteen students were invited to participate in the study. Seven males and three females were eligible from Lake High School, while three males and three females were eligible from River High School. Of those sixteen students, eleven students returned the required participant assent forms - seven males and four females. Thus, eleven successfiul students, two teachers, and two principals from the selected schools were included in the study. The researcher only sought mathematics teachers students and principals identified as considerably influential in students' mathematics achievement. In some cases, those teachers identified as
influential, were no longer employed with the school. Issues of attrition at Lake High and River High mirror national trends which indicate a large number of teachers transfer out of the most difficult urban schools to seek employment elsewhere in the district or in suburban school districts (Jorissen, 2003).

## Data Collection

The researcher used a varied approach to data collection including group and individual interviews, and open-ended surveys. However, all three sets of participants (students, teachers, and principals) were subjected to tape-recorded interviews.

Each of the eleven students in the study completed a ten item open-ended survey related to the objectives of this study. The students then participated in one-hour taped small group interview sessions as a fol-low-up to the survey results. The group interviews took place within a week of the participants completing the open-ended survey. The group interviews were not focus groups but rather provided a group setting in each individual addressed all interview questions (Maton et. al, 1998).

The researcher also conducted separate one hour audio-taped interviews with the principals and math teachers. Math teachers were interviewed individually in their classrooms for one hour each and principals were interviewed individually in their offices for one hour each. To this extent, the study attempted to incorporate data triangulation, which is the use of a variety of data sources in a study (Denzin \& Lincoln, 1994). Marshall \& Rossman (1995) point
out that studies in which more than one data gathering method is used can strengthen the study's usefulness for other settings.

All interview questions were guided by Merriam's (1998) guidelines for interview questions designed to stimulate responses. These questions include: (1) hypothetical questions (e.g., suppose you were the principal of the school, what would you do to improve the academic status of your school?); (2) devil's advocate questions (e.g., some people typify your school in a largely negative manner, what would you say to them?); and (3) ideal position questions (e.g., describe to me your idea of an ideal school).

Additionally, all of the collected data have been reduced, coded, clustered, and analyzed for congruent themes (Miles \& Huberman, 1994). Those processes were guided by Siedman's (1998) suggestions for examining interview data which include: recognizing and explaining connective threads among the experiences of the participants; confirming or rejecting previous instincts; determining if participant responses are consistent or inconsistent with the literature; and identifying interview data that may go beyond the findings of prior studies. Further, the researcher submitted transcripts to the participants for their review and/or editing, in a process referred to as member checking.

## Results

One of the aims of this study was to highlight the often overlooked resilience of successful mathematics students in academically unacceptable schools (Martin, 2000). The results presented will provide the reader with a few exemplars of suc-
cessful students in academically unacceptable schools and it is hoped that these results will provide greater understanding of the issues discussed in this study (Patton, 1986). Further, although this study only provided descriptions of students from two low performing schools, it also captured and perhaps reflected larger issues associated with low performing schools, high achieving mathematics students, and school choice. In the aggregate the above issues in fact represent the building of theory related to "unacceptable" low performing schools and African-American high achievers (Yin, 1989).

## Research Question \#1

The first major research question in this study sought to determine the reasons why successful mathematics students have been able to thrive in academically unacceptable schools.

Student participants in this study primarily attribute their success to their mathematics teachers, and their own personal traits (ability to focus, desire to succeed, determination, curious/inquisitive nature, and overall belief in self). The participants mentioned that teachers' ability to separate mathematics into comprehensible chunks ultimately allowed them to flourish in mathematics. This approach to teaching led students to an increase in student confidence in mathematics, an apparent decrease in mathematics anxiety, and an overall change in attitude towards school among the student participants (as mentioned by student participants). The second most prevalent reason the participants feel they are suc-
cessful is because of personal traits they possess. The participants mentioned a range of personal traits which include the ability to focus, desire to succeed, determination, and curious/inquisitive nature. Collectively, it is also evident that these students have a strong belief in self. Each of the students circuitously or directly pointed out that believing they could succeed contributed to their success in mathematics. Bauman (1998) points out that African Americans who take a role in their own advancement invest more time in their education and thus seek greater economic opportunities as a result of their personal commitment to education.
"The fact that I am considered a successful mathematics student has a lot to do with my math teacher, Mr. Greece because math was my worst subject. There were times when I would want to just give up, maybe it's just not for me, but he told me 'don't give up, it's not hard, you can do it.' From there it was all me. I began studying harder. I began to get on top of everything. When I am determined to do something, I will do it and I was determined to succeed in math. I became even more serious about my work once I tasted success. Plus I am motivated to graduate. It's like my biggest thing that I have is that I want to graduate. That's my real motivation, graduation." Sara, River High School.
"I have to give credit to my mathematics teachers because I believe that I am a success because of their
teaching. In addition I have been a successful mathematics student and will continue to be successful because I do not just rely on the education I get at this school. I read books beyond the school walls. I have a great interest in doing that. I guess it is my inquisitive temperament. I guess it is the way my parents raised me and what I learned - kind of through life. So if you want to be successful don't rely solely on the school. School is only a portion of what is required to be a success. I encourage them to read books, watch educational programs, and use the Google search engine. I think that kind of reflects my view of education." Zeke, Lake High School
"The reason why I am a strong student in math is because the teachers that I had taught me well. I listened and paid attention in class because I did not think I was that good in math at one time. So I started attending school tutorial programs after school, on Saturdays and during the summer. All of the teachers in the programs helped me be successful. Once I started doing well, all of them became very supportive of my success. They often compliment me on doing well. It could be because they really took time with me. Anything I didn't understand they always explained it to me, step by step. They kept going over it with me. Anything that could have helped me improve, they offered it to me. So I
think they wanted the best for me.
Pandora, River High School
"I think we have some good teachers here. I take advantage of that. Some kids do not. Like when I had Ms. Leavy, I would stop the class and make them be quiet. Ms. Leavy used to talk to me about how I am doing in class, so then I started paying attention and participating in class. She tried to make it fun for me and I started catching on a little at a time. Basically, that's why I have a lot of respect for her. She doesn't teach here any more, but every time I see her I always speak to her and tell her how good she made me. Without her, I would probably have dropped out. Now math is my favorite subject. I'm successful because I had people like Ms Leavy who were forcing me to learn. That made me want to learn and I want to do well in my classes. I reached a point when I felt I was ready to learn different things and that turned into success." Titus, River High School

One of the student participants had a peculiar set of circumstances. He explained that he had poor mathematics teachers in the past and a tumultuous, dismal home life. He attributes his success to a determination to be the best he can be and "be better than my family." His case is even more intriguing because it implies that his personal tenacity and self-confidence offset the oppressive state of affairs present in his home and school life.
"The thing that made me successful is that I have never shied away from being focused on my education. I don't think it really had anything to do with the teachers. I had two mathematics teachers last year and both of them were not that good. If I would have had a good teacher like, Mr. Egypt, who teaches me this year, I would have had an even better score on the GEE.
My success also comes from me wanting to prove people wrong because when I get home I get called 'stupid.' I tell them that I am not stupid and I am going to be better than you. Well, it really makes me want to try harder because I know I am going to be better than them and that's going to be the final word on it. So, I have to do well because my home is so horrible. I really want to do something better with my life." Vernon, Lake High School

Although parents and early school background were mentioned by the student participants, those responses were not pervasive. Three of the students mentioned that their parents were indeed contributors to their success. They mentioned that parental discipline, encouragement, and general rearing were the main things parents have done to ensure their academic development. This, however, was not a major thread in the interviews.
"One of the keys to my success is that I am curious. 'Curiosity killed the cat,' but in my case, curiosity made the cat a genius. Like if I do
not know something and I am curious about it, I am going to look it up. I think my curiosity started out when I was a kid. I used to play with Lego toys and wonder how different pieces can fit together and make something bigger. You start toying with that and everything else starts to get bigger and better. I have to admit my family does contribute a lot to my success. My dad is a police officer, so I have a certain respect for authority. You sort of listen to what they have to say in different ways and it has that influence. My mom raised me in church school for most of my elementary school years and then she put me in home school for 7 th and 8 th grade. Since my brother got into trouble when he was my age they needed to show me what not to do. They talk to me about stuff. They rode me. They said don't do this and you know what's going to happen if you do this. They make sure I'm using common sense. Yann, Lake High School
"My parents have a big influence on me. My mom likes to brag to her friends and family about how well I'm doing. That inspires me to try harder. She also expects a lot from me. If I make all ' $A$ 's' and one ' $B$,' she will say why did you make the 'B'? She says 'A's" are what I am supposed to make. When I do well I think I am doing it for both my parents. For me, I like doing well in math because it's my favorite sub-
ject." Ulysses, Lake High School
Conversely, the adult participants (teachers and principals) felt that student achievement was a direct result of parental influence, prior educational foundation, and personal character traits. In reference to personal traits, the principals and teachers seem to agree that strong personal traits increase the chances of being a successful mathematics student. Aptitude, fortitude, and purposeful commitment were among the desirable traits mentioned.

> "What separates high achieving math students in my school from other students is their aptitude for math and their fondness of the subject. I think number one it's their parents at home. They have parents who really care about their education and want them to do well academically. Additionally, high achievers at my school overcome obstacles because they have a support system. I think they need a lot of support. That is a big part of my role, to try to give them the support they need at school. Even though I think their success is more about the foundation in earlier grades and from their parents, I would like to attract and retain outstanding math teachers to work here because I think they can really make a difference. Mr. Noah, Principal, Lake High School

Moreover, one of the teachers did mention that his work is less arduous if he has a student who has a good parental support
system and solid academic foundation; on the other hand the same teacher also said that if he encounters a student who has had multiple years of inept teaching, reversing those influences is a monumental task and perhaps unalterable. The task becomes even more problematic with the added pressure of having the student prepared for standardized high stakes test instead of focusing on foundational mathematical skills the student may lack.
"You have to teach even harder because you teach at a \{low performing school\}. There is a lot that goes into it. You try to get the kids to buy in, first of all. Then after you get them to believe that they can do, then you have to show them that they can succeed. Of course, if the child is rooted at home and has values and the parents have ingrained in him the importance of an education, all I am doing is coming back cleaning and buffing it up. My work is not as laborious with that particular student as it would be with someone who did not have that type of upbringing. I don't have to convince that student that he is capable of doing. He knows that he can do." Mr. Greece, Mathematics Teacher, River High School

One teacher mentioned that discipline was a major problem in urban schools; thus insinuating, that a cadre of self-disciplined students would lead to more instructional time for teachers, which would likely lead to higher achievement.

## Research Question \#2

The second major research question in this study asks, why have successful mathematics students chosen to stay in academically unacceptable schools despite having the option to leave for a better performing school?

All of the student participants in this study firmly believed that remaining at their present school was the best choice for them. The reasons cited all revolve around the comfortable feeling they have with their schools. Students' familiarity with school rules, friends, teachers, and atmosphere in general convinced them to continue attending the academically unacceptable schools. Some even mentioned that their schools have developed a family atmosphere. They also mentioned that a change would not be worth building new relationships with teachers, students, and a new school culture. It is safe to assume that these students trust their respective schools. Goddard et al., (2001) found that trust makes schools better places for students to learn: the greater the trust the greater the student achievement.
"I decided to stay at this school because I am athlete and I am a part of several extracurricular organizations at the school. If I were to leave, I would have let down my teammates. I also did not want to start all over again as far as getting to know a new school and new people. In a way since people feel this is a bad school I wanted to let them know that I can do something good here. There are some people at this school that can do good things. However, I do know some people will think that

I cannot do much because I attended River High, and think other students can do more because they attended better schools." Ruth, River High School
"No matter what the problems are at River High I would not leave it for anything in the world. I love my school. I wanted to get attend this school since I was in elementary school. I have always lived down the street from the school. When I was going to elementary school, I would look from through the window from the bus at River High and say 'one day I am going there.' When the opportunity came to choose another school, I said 'forget it, I am where I want to be.' Omar, River High School

Adult participants believed that students should stay at their present school because: a) the school does provide them with a good education; b) they could take on the role of humanitarians - helping the other students in the school to improve; c) they could stand out academically; and d) they could continue to receive adequate support from teachers (see Table 8). Only one adult participant mentioned that parents would have any impact on a student switching schools and none of the student participants did so. Perhaps since the student participants are in high school they are given more liberty to make decisions regarding their future.
"If I had the option to leave and I was a high-achiever in math student,

I guess I would stay simply because I would be the top of the line. I would be one of the top students here, and if I had this in my heart I could help my fellow students. I could certainly excel and be a big fish in little waters as opposed to going to a situation where everybody excels and might just be one in the line. So, if I were a high-achieving math student, I would want to stay, first, because I had this ingrained thing in my heart that I would like to help my classmates. Secondly, I would be that big stick in little waters over here." Mr. Moses, Principal River High School
"If I were a high achiever in this day and age I would want to stay at this school to help raise the level of academic achievement of the ones that are not as academically talented. As a teacher, I have helped out high achievers so in turn I expect them to help the others. On the first day of school I tell them, 'I'm going to treat you guys like bananas. They start laughing. 'A banana?' Yes! I'm going to peel you until I get to the good part, and I peel them. It would be great to have some of those high achievers helping me peel students in need of assistance." Mr. Egypt, Mathematics Teacher, Lake High School

Conceivably the most stunning revelation from major research question number
two is the predominant view that graduating from either academically unacceptable school would translate into future success - as an adult. The student and adult participants felt if all variables were the same students would fare better in life if they graduated from their present school rather than a higher performing school. The participants believe that their experiences at Lake High and River High mirror those that are common in the "real world." Thus it is assumed by the participants in this study, that attending these socially challenging schools will make them better equipped for life's ups and downs. This is of particular importance in light of Bonner's (1997) study which found that African-American students emerge into the adult world confused about their identity, and have problems relating to Black and non-Black populations. This particular group of students may not have such problems because they may have observed or endured similar life lessons in high school.
"I decided to stay at this school because I feel comfortable here. A part of learning is opening your mind. You can't accomplish that by feeling uncomfortable. I think that I will probably come out as a better student than somebody who came out of a better (performing) school, just because I had extra problems to deal with and if we made the same score, and I went through a little bit more, it will make me a better person overall." Warren, a River High School
"One reason I decided to stay at this
school is that it does not matter what I school go to I can still get a good education if I stay focused and listen to my teachers. I also feel very comfortable here at Lake High. I want to also prove people wrong who would say it's not a good school. I really feel that I will be more successful graduating from here because I am dealing with situations that occur in the real world and that will help prepare me for real life." Xana, River High School

## Conclusion

It is unlikely that the designers of accountability systems can fathom the heinous conditions present in academically unacceptable schools. Participants in this study mentioned an array of problems from apathy and restlessness to anger management and violence. For the average student, the above problems are insurmountable and subsequently inhibit their ability to achieve academically; especially in a challenging subject area like mathematics.

Fortunately, the students in this study are among a cadre of exceptional students who are able to persevere in spite of being placed in undesirable conditions. They exhibit an uncanny resilience that seems to immunize them from the perils associated with academically unacceptable schools. Moreover, they collectively have a staunch commitment to the school that cannot be altered by the enticement of a perceived better school. This study gave them the
opportunity to share the tenets of their success, which turn out to be insightful and relatively reasonable.

Educators and those who aspire to improve low-performing schools must take heed of the advice of those students who have experienced success under the duress of attending an unacceptable school. Although it may seem a cliché, unacceptable schools need good mathematics teachers: yet it will take a monumental shift in educational policy to attract good mathematics teachers to poor performing schools. Moreover, such transformation calls for a redistribution of funds that would provide worthwhile incentives for teachers to work in low-performing schools, and provide meaningful professional development (from universities, local/national consultants etc.) to help teachers engage in instructional practices that lead to high achievement and increased efficacy among inner-city high school students. Are policy makers, universities, businesses, and the community at large willing to make radical changes to the way we respond to academically unacceptable schools, or will we continue to rely on superficial solutions to an alarming problem? If we continue to be unresponsive, we can expect only to exacerbate the problem, not solve it.

Further, school principals, teachers, and leaders must make a more concentrated effort to exalt students who are highachievers. In light of what successful students have mentioned in this study, esteem is a function of success. Therefore, efforts to increase esteem and subsequently increase achievement should be of the
utmost priority. Hence, stars of the mathematics classroom should be higher on the proverbial totem pole, than stars of the basketball court. Changes in school culture of this kind can only be effectively initiated by savvy administrators who truly understand that in the age of accountability it is the academicians who are the crown jewels of the school, and not the athletes.

Metaphorically, remedies such as the above would require an "act of Congress." Unfortunately, if you consider Congress' recent track record on educational reform that may not even be a wise decision. As a result of the Congressionally-approved No Child Left Behind Act, low-performing schools are bemoaned with defamatory labels and thus have further stigmatized their students. Judiciously, the act offers students the chance to switch schools and attend a better performing school. Even though the concept seems meritorious, preliminary results show that large numbers of students have an unwavering commitment to their schools. Furthermore, high schools have evolved into social phenomena that promote school pride: that same school pride evokes a sense of school citizenship that is unlikely to succumb to the lure of a better performing school - which in many ways negates the concept of school choice.

If current trends in accountability systems continue, inner city schools will bare the brunt of the ramifications for not meeting academic standards. Most often mathematics ineptness is the major culprit for not meeting such standards. Solutions to this problem run the gamut, but it seems that assigning wretched labels (such as
academically unacceptable) is not the answer. Who can possibly benefit from such designation? Conceivably, the labels may have been designed to jumpstart listless administrators, teachers, and students. Unfortunately, early outcomes indicate that once schools are tagged with low performing labels, they have a tendency to maintain that undesirable status which may imply that the listless remain listless.

Nonetheless, very few solutions include the suggestions of students who actually succeed while enduring troubling circumstances. If input from successful mathematics students is consistently ignored, it is likely that the current achievement gap will persist. Consequently, a generation of underserved African Americans from inner-city schools may become disenfranchised with no high school diploma and limited means to fulfill the American Dream.

In conclusion, the findings from this study should not be interpreted as anecdotal. States have scurried to comply with NCLB and initial results reveal a bevy of circumstances similar to those discussed in this study. As policymakers and educators view the data from the lowest performing schools, it is hoped that they look beyond the statistical mean of each school when searching for solutions. The outcomes of this study show that it may also be wise for educators and policymakers to consult high-achievers in low performing schools who outperform school means. These exceptional students have the propensity to provide valuable input in creating practical blueprints to improve the status of underachieving schools. This
approach is perhaps more viable than exclusively encouraging a mass exodus from schools which were once the nucleus of communities.

Further study is encouraged to: 1) better understand the experience of successful mathematics students who attend low performing elementary and middle schools; 2) determine if students who exercise their right of school choice demonstrate success at the new school; and 3) determine the influence of parents on success and school choice in elementary, middle schools, and high schools that are considered low performing.

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