SCHOOL DISTRICT’S SOCIOECONOMIC STATUS AND COLLEGE ENROLLMENT

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Submitted to

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Submitted in Fulfillment for the Requirements for 61-683 Research Paper

Summer 2013

November 13, 2013
ABSTRACT

This study was completed to determine if there is a significant difference in college enrollment for students based upon a school district’s socioeconomic status. It is important to understand and interpret the data that correlates to student enrollment into post-secondary institutions and their socioeconomic standing. Research shows that students who are enrolled in schools that have an increased percentage of students beneficial to free/reduced lunch tend to have a smaller enrollment into colleges or universities. The data also concludes that these same students in low-socioeconomic areas are not getting the same opportunities to participate in “elite” colleges. The reasoning behind this is not exact, but can be credited partly to lower performing school districts, lack of monetary funds, and less exposure to the college selection process. After compiling and reviewing the findings of this study, current research, relevant literature, and the statistical data from the state, it is found that there is a difference in college enrollment based on a student’s location and socioeconomic standing. Students who are enrolled in more affluent school districts are privy to more opportunities and “upper tier” college educations.
INTRODUCTION

Background, Issues and Concerns

There have been concerns about student enrollment into colleges and universities when graduating from low socioeconomic school districts. Recently, the federal and state government have put into place many new rules and regulations that they believe will help level the “playing field” between high and low socioeconomic school districts and student enrollment into a higher education setting. Many are concerned that the low socioeconomic school districts are not as adequately funded and in turn do not give their students the best chance for success in the future. Some are also concerned that many high performing students in low socioeconomic school districts are not given equal opportunity to access the elite colleges and universities across the United States as a result of their lack of parent income. Researchers are concerned that a student’s socioeconomic status and residence location has become a dramatically influential factor in regards to those students participation in a post-secondary institution.

Practice Under Investigation

The practice under investigation will be looking at student enrollment data over the past five years. There will be an investigation to see if there is a significant difference in student enrollment into colleges and universities between higher socioeconomic school districts and lower socioeconomic school districts. This will be looking at the data provided by the State of New Jersey Department of Education (NJDJE) and if there is a difference, extended research will be examined to
determine the current trends in college enrollment based upon a student’s socioeconomic status.

*School Policy to be Informed by Study*

Currently, the government at the state and local level is looking deeper into higher education enrollment as being part of a school’s “grade” in regards to their success as a school district. College enrollment is fast becoming an essential tool to determine if a school district is providing opportunities for advancement for their students. If a discrepancy between high and low socioeconomic districts exists, districts need to know why it exists, and how to effectively combat the trend.

*Conceptual Underpinning*

Every student learner has different goals and ambitions in regards to their future plans. However, not all students are given the opportunity to seek out their desired future. In the world today, nothing is free, and education might be the most expensive and necessary tool needed to successfully reach a future goal. While school districts do engage students in a positive manner and encourage them to follow their dreams, it is easier said than done. For many, parent income plays a large part in where students go to college and most importantly which college they attend. As a result of this, we need to determine if all students, regardless of their socioeconomic status, are showing enrollment numbers into colleges and universities that are comparable. Higher socioeconomic school districts are going to have an edge in college enrollment numbers, but a determination must be made to reveal if a significant difference exists.
Statement of the Problem

If there is a significant difference in enrollment of students into colleges and universities based on their socioeconomic status, districts, colleges, and the government need to be held accountable and devise methods that would successfully enable all students to have an equal opportunity to each college and university across the U.S.

Purpose of the Study

The purpose of this study is to determine the difference, if any, between high socioeconomic school districts and low socioeconomic school districts and their student enrollment into colleges and universities. In addition, statistical data will be analyzed to determine what role socioeconomic status has on students and their participation in higher education. The information gained will provide insight on the current trends in higher education participation based upon a school districts socioeconomic status. The study will provide awareness to parents, teachers, and administrators, and in turn hopefully incite change to even the playing field between two opposite ends of the spectrum in regards to socioeconomic status and college enrollment.

Research Question

RQ 1: Is there a significant difference in student enrollment into colleges and universities between higher socioeconomic school districts and lower socioeconomic school districts?

Null Hypothesis
Ho: There is no significant difference in student enrollment into colleges and universities between higher socioeconomic school districts and lower socioeconomic school districts.

*Anticipated Benefits of the Study*

The results of the study are intended to closely investigate the current trends in college enrollment based upon a student’s socioeconomic status. In addition, it is intended to analyze the low-income school districts as well as the high-income school districts to determine why one or the other might have an advantage in terms of enrolling their graduates into a higher education setting.

*Definition of Terms*

NJDOE – New Jersey Department of Education

HSPA - New Jersey High School Proficiency Assessment

SAT – Scholastic Assessment Test is one of the common assessments college’s use to assess if a student is academically fit to enroll in their higher education institution.

ACT – one of the common assessments college’s use to assess if a student is academically fit to enroll in their higher education institution.

NCLB – No Child Left Behind was instituted in 2000 and sets certain goals for school districts to achieve in order to reveal that the district’s students are progressing academically.

*Summary*

A study was conducted to determine if there was a significant difference in college enrollment for Senior graduates based on the type of socioeconomic district they were educated in. If the t-test reveals that in fact there is a significant difference,
school districts and the United States Department of Education must devise techniques and programs to help balance out the educational opportunities across the country regardless of a student’s financial situation. It is important to note that if new initiatives are not put in place, a continuous cycle of poverty and under-educated population will continue to rise. After the study is completed, school districts and prominent officials will be able to understand trends in the higher education community, and in turn devise methods to ensure that all students are being prepared for a quality, higher education institution.
REVIEW OF LITERATURE

Currently, the American educational system is under massive reconstruction. The reasoning behind the reconstruction is the extending gap that exists between high socioeconomic school districts and low socioeconomic school districts. The achievement gap that exists between the two is constantly growing and in turn affecting our economic stature in the United States. George W. Bush attempted to close the gap by passing the No Child Left Behind Act in 2001. However, as my research has proved, little has changed in terms of opportunities becoming equally achievable for students who live in low-socioeconomic areas. Nidhi Khattri (1997) conducted research that examined if there was a difference between performances with all low socioeconomic settings. Khattri closely examined poverty stricken areas in rural and urban settings to determine if a substantial difference existed between the two. Khattri attempted to understand if a discrepancy existed between types of poverty areas, and if it affected their academic performance, as well as their post-secondary participation. Khattri notes, “rural students tend to benefit from the small size of rural school and from the nature of community connections”, (Khattri, 1997, p. 93). The research concludes both urban and rural poverty stricken areas have difficulties keeping up with other school districts as a result of the lack of funds available to them. However, as many standardized tests reveal, urban areas that are struggle socioeconomically, are having trouble closing the gap in academic achievement. In addition, this provides less opportunity for those students to participate in quality post-secondary institutions.

Understanding that a gap exists between the schools that “have” and those that “have not”, states have been attempting to devise creative and efficient ways to close the
gap. Many educators and analysts believe that closing the gap provides equal opportunity and can have a positive dramatic affect on our country’s financial issues. Marina Marcou-O’Malley (2011) wrote an article titled, “Back to Inequality”. In this article she discusses state plans for “great reform”, and taking funds and assets from wealthy districts and distributing them equally to struggling districts. However, as the title suggests, little has been done to achieve reform in education. O’Malley quotes New York Governor Cuomo, “I think the inequity in education is probably the civil rights issue of our time. There are two education systems in this state...one for the rich and one for the poor and they are both public systems,” (O’Malley, 2011, p. 4). O’Malley goes on to reveal in her data that the only school’s that saw any type of monetary change, was in fact that of low-socioeconomic standing. The data argues that in 2009 there was a dramatic drift away from closing the gap on education as a result of the recession and lack of government backing. As a result, low-socioeconomic districts regressed back from whence they came.

In regards to the lack of funding from the federal government, the Obama Administration is devising a method that would properly allow them to determine a student’s socioeconomic status. This system would better equip the Department of Education to understand what opportunities students have in terms of college enrollment, and to track their graduation status in a post-secondary environment. Author of the article, Greg Toppo (2013) notes that the Department of Education is attempting to classify students by more than just their parents’ income or education levels. Rather, the DOE would take into account how many times a family has moved, their home-owning status, test scores, and medical assistance provided. This would revolutionize the idea of
what qualifies as “low-socioeconomic” in our country today. Therefore, it would modify data that was gathered to fulfill my conclusions in this action research paper. Toppo also writes that the DOE would take into account home size, backyards, rates of single parenthood and unemployment.” Education researcher, Tom Loveless (2013), claims that this could reform policy and these are questions that can further drive policy and help “close the gap”. Toppo (2013) also notes that self-reported data by children is highly unreliable, as is a district’s free and reduced lunch count. He argues that a financial crisis within a household would not hit the statistics given to the state in a relevant matter.

The financial crunch is being absorbed across the country. In fact the Austin American-Statesman discusses lower income school districts and the faculty that they employee. According to the study completed by the Austin American-Statesman, school districts that are in lower income areas have difficulty hiring effective teachers that will in turn help students progress on state testing. The article constantly makes a connection between low-income towns, “rookie” teachers, and low-test scores. This is crucial in regards to low-socioeconomic students getting the same opportunities as high-socioeconomic students. In their findings, low-socioeconomic school districts do not provide the same resources and advanced classes that other districts that are affluent can provide (Wermund, 2012). Their lack of experienced and highly qualified teachers makes it difficult to do so.

Schools and areas that have monetary concerns are attempting to give their students adequate resources for educational growth. Relating socioeconomic status and achievement, Reardon (2013) compiles data and research to determine the relationship between family socioeconomic characteristics and academic
achievement. Reardon’s central focus is on the achievement gap based upon high and low-income families. Reardon spans his research over the last 50 years to determine the factors that might be contributing to the academic achievement gap based upon economic status. Reardon bases his research on the fact that family income has become increasingly important in a student’s achievement. Reardon’s research attempts to determine the variables that impact student success. Even though over the past 50 years the gap between children with highly and less educated parents has remained constant, Reardon concludes by stating “a family’s income is now just as important as parental education when forecasting a child’s academic success” (Reardon, 2013, p. 43). Knowing this, it is concerning. If a student’s family is considered low income, are they able to get the same chances at a quality education after high school?

Bernal, Cabrera and Terenzini (2001) conduct research to answer the previously mentioned question. With the legislation passed, and the No Child Left Behind mandate, Cabrera and Terenzini examine the data behind low-income students and their numbers in college enrollment. Cabrera (2001) continues by examining the financial aid available, parent education level, and other factors that they believe affect the enrollment of low-income students. The article also goes further than most and tracks students of low socioeconomic status after college to determine their job satisfaction, degree completion, and earnings. The overlying argument made by the two authors is that more needs to be done to assist students in low-income school districts before they enter the high school level. Attempting to fix the problem when students are in high school, in the author’s mind, is not
feasible. Cabrera and Terenzini argue that students from low socioeconomic school districts do not get the same opportunities as other wealthier districts. However, where they differ, is that they believe college enrollment is lower among poverty area districts because of the lack of investment into the elementary schools and intermediate level schools. In their research they contend that attempting to give these students a chance at a highly respected post-secondary institution is an uphill battle if their academic achievement is not addressed before high school.

The Institute for Higher Education Policy compiles numerous amounts of data to convey to the reader the statistics behind low-income student enrollment into higher education settings. The IHEP notes, “poverty still matters a great deal in terms of the types of institutions in which young adults are initially enrolling,” (IHEP, 2011, p. 3). This organization also takes into account and analyzes those individuals not living in poverty-stricken environments, and also reveals their higher education experiences. In addition, the article examines an 8-year period to determine if the trends are improving or still in decline. The IHEP finds that lower-income students tend to start their college careers at community colleges as a direct result of their lack of income or ability to secure loans. The IHEP also notes that those low-income students that are able to secure the necessary loans to attend elite colleges or universities are often uneducated on the process of paying back and obtaining school loans, whereas students in affluent high schools are more educated on the process or are able to take lesser amounts of student loans. Interestingly, the IHEP notes that high performing students from low-socioeconomic districts
have an increasing difficulty in completing a bachelor’s degree from “elite” institutions. This would reveal that they are inadequately prepared for college.

While the IHEP monitors individuals enrolling in post-secondary institutions, it is important to understand what top colleges across America are doing to ensure that low-socioeconomic students are given the same chances as their peers, in terms of enrollment prospects. The Covering Poverty Organization takes a close look at what some of the top colleges in America are saying they are doing to recruit low-income students who have the grades to attend their school, and what is actually being done. According to Cameron, “top colleges are doing very little to make it possible for students who are high-achieving, but are from low-income school districts, to attend their selective schools” (Cameron, 2013, p. 2). Cameron also compares high and low income students and what type of schools they are applying to. Cameron studies the “selective colleges” and how many low-income students are actually attending their college. Cameron finds that 34% of high-achieving high school seniors in the bottom fourth of income distribution attended one of the nation’s 248 most selective colleges, compared to 78% of top students in the highest income quartile. However, Cameron, unlike the IHEP, claims that if low-socioeconomic students do attend selective colleges, they succeed at a graduation rate of 89%. Cameron argues that most selective colleges do offer financial aid to close the gap and eliminate the financial burdens for low-income students. Cameron concludes by noting that a large factor as to why low-income students do not attend selective colleges is their lack of interest or application to these institutions.
There are researchers and politicians that still argue that selective colleges are not doing their part in guaranteeing equal opportunity for all high performing students, regardless of their income status. Perez-Pena (2013) examines the current rally against affirmative action based enrollment into colleges and universities. Instead, many would like to see colleges and universities use a new tool to enroll low-socioeconomic students. Researchers believe that given access to a university based upon a student's race has yet to fix the problem that lower income students are facing. The article argues that many of the applicants applying into the elite colleges are in fact not “poor” and are using their race to access their desired school. Perez-Pena and other researchers point out that this is not beneficial to our society and those who need financial aid and an equal opportunity to pursue an elite education. The article also examines the methods and statistics that challenge the notion that colleges and universities are actively pursuing low-income, high achieving, students to attend their schools.

To make a correlation between student achievement, income status, and college enrollment, the data issued by the state of New Jersey was closely examined. The database issued by the State of New Jersey is made for the public to access and evaluate school districts across the state. Each school across the state of New Jersey is given a “report card” each school year. The data on the report cards analyzes state assessment scores, college enrollment, special education size, AP testing, school size, college and career readiness, school rankings, etc. This data is of extreme importance when investigating if there is a discrepancy between low-
income school districts and middle to upper income school districts and their student participation in higher education.
RESEARCH METHODS

Research Design

Statistical data was analyzed to determine what role socioeconomic status has on students and their participation in higher education. The independent variable being tested was rate of free/reduced lunch percentages for each school district. The dependent variable tested was SAT scores above 1550 and college enrollment. The information gained will provide insight on the current trends in higher education participation based upon a school districts socioeconomic status. The study will provide awareness to parents, teachers, and administrators, and in turn hopefully incite change to even the playing field between two opposite ends of the spectrum in regards to socioeconomic status and college enrollment.

Study Group Description

30 school districts from the North Jersey area that have reported their academic achievement data from 2011-2012. These groups evaluated report data regarding free/reduced lunch, academic achievement (SAT scores), and post-secondary enrollment.

Data Collection and Instrumentation

Archived date from the NJDOE (New Jersey Department of Education) was collected to identify raw data from low-socioeconomic and high-socioeconomic school districts in Northern New Jersey from the 2011-2012 school year.
Statistical Analysis Methods

A t-test was conducted to find if there is a significant difference in college enrollment based on a student’s school district’s socioeconomic standing. The source was broken into two categories: males and females. The mean, mean D, t-test, df, and p-value were concluded from this test. The Alpha level was set at 0.25 to test the null hypothesis: There is a significant difference in enrollment into colleges or universities, based upon their attending school district’s socioeconomic status.
FINDINGS

A t-Test was conducted to determine if a significant difference is present between a school districts free/reduced lunch percentage and their college enrollment numbers. The data was compiled and organized into the chart below.

Figure 1

t-Test Analysis Results for 2011-12 School District F/R Lunch Percentage and College Attendance

<table>
<thead>
<tr>
<th>Source</th>
<th>Mean</th>
<th>Mean D</th>
<th>t-Test</th>
<th>df</th>
<th>p-value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lowest 50% (n=15)</td>
<td>58.20</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Highest 50% (n=15)</td>
<td>80.73</td>
<td>22.53</td>
<td>5.62</td>
<td>28</td>
<td>.000005</td>
</tr>
</tbody>
</table>

Note: Significant when p<=0.25

Thirty school districts were chosen from the Bergen and Passaic counties. These schools were chosen based upon their income areas, both high and low. To determine which school district was a high-income or low-income district, their property taxes and average household income were closely examined. In order to accurately determine if a discrepancy lies between the two types of school districts, it was necessary to choose schools from opposite ends of the income spectrum. The data collected was from the New Jersey Department of Education website which contains data pertaining to each school district such as; free/reduced lunch, SAT scores, college enrollment, school attendance rate, school enrollment, etc. After the data was collected, the thirty chosen schools were broken down into two tiers. The mean of the lowest 50% was 58.20 and the mean of the highest 50% was 80.73. The Mean D, or difference between the two groups, was 22.53.
The t-Test result was 5.62 and the df was 28. The null hypothesis states that there is not a significant difference in student enrollment into colleges and universities between higher socioeconomic school districts and lower socioeconomic school districts. This null hypothesis was rejected because the p-value, .000005, is lower than the alpha level of 0.25. This shows that a gap does exist between the two types of school districts. Students who graduate from higher-socioeconomic school districts do in fact have more students enroll in colleges or universities.
The mean of students enrolling in college from the high-socioeconomic schools districts was at 81%. The lowest socioeconomic schools saw 58% of their students enroll in colleges throughout the country. Students who are enrolled in school districts that have low free/reduced lunch levels enroll into colleges or universities at an impressive 81%.

There is a discrepancy between the two income levels. This chart reveals the percentages in which each enrolls in a post-secondary institution.
**Figure 3**

**t-Test Analysis Results for 2011-2012 School District F/R Lunch Percentage and Percentage of Students in Tested School Districts that Scored >1550 on SAT**

<table>
<thead>
<tr>
<th>Source</th>
<th>Mean</th>
<th>Mean D</th>
<th>t-Test</th>
<th>df</th>
<th>p-value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lowest 50% (n=15)</td>
<td>11.73</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Highest 50% (n=15)</td>
<td>60.53</td>
<td>2.80</td>
<td>1.08</td>
<td>2.80</td>
<td>1.71E-11</td>
</tr>
</tbody>
</table>

Note: Significant when p<=0.25

Thirty school districts were chosen from the Bergen and Passaic counties. These schools were chosen based upon their income areas, both high and low. To determine which school district was a high-income or low-income district, their property taxes and average household income were closely examined. In order to accurately determine if a discrepancy lies between the two types of school districts, it was necessary to choose schools from opposite ends of the income spectrum. The data collected was from the New Jersey Department of Education website which contains data pertaining to each school district such as; free/reduced lunch, SAT scores, college enrollment, school attendance rate, school enrollment, etc. After the data was collected, the thirty chosen schools were broken down into two tiers. In the above t-Test, data pertaining to a school districts free/reduced lunch rate was compared with students who score >1550 on the SAT. The mean of the lowest 50% was 11.73 and the mean of the highest 50% was 60.53. The Mean D, or difference between the two groups, was 2.80. The t-Test result was 1.08 and the df was 2.80. The null hypothesis states that there is not a significant difference in student enrollment into colleges and universities between higher socioeconomic school districts and lower socioeconomic school districts. The null
hypothesis was rejected because the p-value, 1.71E-11, is lower than the alpha level of 0.25. This shows that students in low-income school district areas are not scoring as high, as a group, as their high-income counterparts. The gap between the two groups, in terms of college enrollment, has to be partially as a result of the lower, college qualifying, SAT scores.
The state of New Jersey requires that all school districts report the number of students that achieve above or below a 1550 on the SAT. This number is instrumental for students to get accepted into colleges or universities across the country. The number of students reported by schools with a high-socioeconomic standing reveal that 61% of them have achieved greater than a 1550 on their SAT. However, an alarming 12% of students within low-socioeconomic school districts achieved higher than a 1550 on their SAT. These numbers are very unbalanced and provide insight to why low-socioeconomic school districts do not see the same amount of college enrollment as their high-socioeconomic counterparts. It is also worth noting that the state average for each high school is 43%. This means that on average, each high school sees 43% of their students score over a 1550 on the SAT.
In order to determine if a discrepancy exists between low and high socioeconomic school districts and their college enrollments, it is important to examine student achievement, as well as their rates of free-reduced lunch. The above graph shows that low-income school districts have a free/reduced lunch rate of over 70%, while high-income districts only have a rate of less than 3%. These numbers indicate that there still exists a culture within education of the “haves and the have not’s”. The chart also shows that student achievement on the SAT is highly uneven. Currently, there close to a 50% difference between the affluent districts and the poverty stricken districts. This could be due to any number of issues within the school districts; caliber of teacher, monetary funds, educational system, etc. Whatever the reasoning may be, students are not on an even playing field, and their college enrollment prospects, and future, are left to suffer. As evident in the graph, high-socioeconomic school districts provide their students with
many more opportunities and in turn their college enrollment numbers dwarf that of low-socioeconomic schools.
CONCLUSIONS AND RECOMMENDATIONS

The outcomes reported from this study reveal that high-socioeconomic school districts routinely witness their students enroll into college more than their low-socioeconomic school district counterparts. The findings reveal that the college attendance percentages are tied to each school district’s free/reduced lunch rate. The lower the free/reduced lunch rate is for a district, the higher their college enrollment is, majority of the time. During the research, the few times that this was not the case, was when dealing with inner city charter schools, who do not fall into this mold. However, most, if not all, public schools do follow that trend. The t-Test revealed that the p-value for both analysis were well below the 0.25 alpha level; therefore, the null hypothesis is indeterminately rejected with confidence. There is a discrepancy in college enrollment between high and low-socioeconomic school districts. My finding, as revealed in the t-Test, shows that high-income districts prepare their students better, and those students do in fact have more opportunities available to them, during their college search.

In order to close the gap of college enrollment between these two types of school districts, federal funding needs to be once again examined. Are low-income school districts getting the same opportunities as the high-income school districts? It is also necessary to ensure that all advisors in school districts are aware of federal aide for all types of students, and what is available to them. Professional development for guidance counselors, in their areas of education, should be addressed in a more specific manner. The issue behind low college enrollment for
students in low-socioeconomic school districts could be altered by preparation and awareness by students, parents, teachers, and guidance advisors.

After concluding this study, there are few more analysis and data collection that should be conducted. A study could be performed to determine teacher salaries for the school districts in comparison, as well as their qualifications and level of academic achievement. It would be interesting to determine the difference of caliber between the teaching staffs, in relation to the school districts economic status. It is also necessary to more closely examine why students who perform highly in low-income districts do not apply to “elite” colleges more often. Are all “elite” colleges making their institutions readily available to all types of students?
REFERENCES


