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BREAKING DOWN BARRIERS FOR LOW INCOME AND FIRST GENERATION COLLEGE BOUND STUDENTS: A CASE STUDY OF FIVE COLLEGE ACCESS PROGRAMS

A Dissertation

Submitted to the School of Graduate Studies and Research
in Partial Fulfillment of the
Requirements for the Degree

Doctor of Education

Jennifer J. Damico
Indiana University of Pennsylvania
December 2015

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Title: Breaking Down Barriers for Low Income and First Generation College Bound

Students: A Case Study of Five College Access Programs

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The primary motivation for this case study was to uncover the practices college access advisers use to affect students' aspirations and matriculation into colleges and universities. The study also analyzed how these practices affected the overall culture of the school. This study further considered the interactions of college access advisers with their students in a school serving a predominately low-income student population. The effectiveness of the college access programs on the overall college going culture of the school was also examined. A mixed methods research approach was used to evaluate the components and best practices that the advisers used to generate low-income and first generation college bounds students' matriculation into postsecondary school. Qualitative data collection consisted of individual semi-structured interviews with each of the five participants followed by observations of the advisers using the College Access Tool of Evaluation (CATE). Quantitative data was collected using a Teacher Survey that asked teachers to reflect on the college going culture of the school. Results from the qualitative data collection indicated that the fostering of trusting adviser/student relationships was one of the most important components and best practices that led to college matriculation. Findings indicated that advisers provided students with the opportunities for one-on-one

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counseling, strong social support, and a space to complete college going activities. In

addition, the research identified the following six best practices: lifestyle discussion, academic support programming, college tours, one-on-one counseling, financial aid assistance, and social supports. Regarding the college going culture of the school, the teacher survey indicated there was a need for even more services from college access programs and more information for the school's students and teachers. The study concludes that when given effective social supports and college going, opportunities low-income and first generation college bound students can matriculate into colleges and universities.

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To my colleague Joyce Fratangelo, thank you for your patience and encouragement during this process. Finally, thank you Wendy Koval for helping me keep my feet on the ground and being the distraction I sometimes needed.

This dissertation is dedicated to my incredible family, Denny and Patty Damico and Julie and Pat Kennell. Thank you for always being in my corner. Your love, support, and guidance have made me the person I am today. And to Brie, my one and only constant companion.

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CHAPTER 1

IDENTIFICATION OF THE RESEARCH PROBLEM

"Inequality in the United States has arguably reached levels where it is counterproductive. That is, you can make a case that our society would be richer if its richest members didn't get quite so much."

~Paul Krugman (2002), New York Times

In 2013, American College Testing produced a report entitled, "The Condition of College & Career Readiness 2013." The report's data showed that only 23 percent of tested high school seniors were likely to be successful in entry-level credit-bearing English, reading, math, and science courses at a college or university. These dismal findings followed a published report by Achieve Incorporated titled, "The Future of the U.S. Workforce: The Limited Career Prospects for High School Graduates without Additional Education and Training." Through this work, Achieve Inc., a nonprofit, argued that any individual wishing to become or remain a member of the middle class would need some form of postsecondary education or training to be prepared for work that paid a middle class wage (2012). Therefore, additional education beyond high school is necessary for any American student wishing to maintain or reach beyond his or her parents' standard of living. In order to achieve the proverbial American Dream, students must have the opportunity for post secondary education. As the economy shifts from one of manufacturing goods to one of providing services, more jobs will require four-year degrees (Carnevale, Smith, & Strohl, 2013). Those individuals without a postsecondary education could be destined for financial failure, particularly those individuals who are

low-income and first generation students who lack the knowledge, resources, and experience with institutions of higher education.

The Bureau of Labor Statistics shows that the country's unemployment rate rose from 4.6 percent in 2007 to 7.9 percent in 2014. Well paying manufacturing jobs that once only required a high school diploma no longer exist. Companies are sending manufacturing jobs overseas because of lower labor costs and therefore, eliminating many low skilled jobs. Advances in technology have also lead to a shortage of low skilled employment opportunities. Many more Americans need to complete college degrees in order to repopulate the United States' supply of highly skilled workers and to remain competitive in a global economy (Miller & Slocombe, 2012; Wessel, 2011). A college degree will also be a requirement to become a member of the middle class. As suggested by Friedman (2007), a well functioning democratic society needs a stable and vast middle class to maintain a comfortable standard of living for all of its citizens.

The time of supporting a family without a college degree is nearly extinct. This is more than startling considering 46 percent of those who enroll in a U.S. college fail to graduate within six years (HCM Strategists, 2013). Factory and manufacturing jobs that many individuals relied on as a vehicle to the middle class are rare, and without further education, college dropouts may struggle to remain part of the middle class.

While the American job market is changing, so are the chances of advancing into a higher social class. Studies have found that the chances of social mobility have steadily declined since the 1970s (DeParle, 2012; Scott & Leonhardt, 2005). Economic inequalities in the United States are vast and at times striking when noting the differences in income between the country's top 10 percent and lowest 90 percent. Over the past 25

years, the top deciles' share of income has increased to 50.4 percent, the highest amount since the 1960s. The top one percent of families has fared even better with their incomes growing by 86.1 percent over the past 20 years while the incomes of the remaining 99 percent only saw a 6.6 percent increase (Saez, 2015). Perhaps the most disturbing finding is that the bottom 25 percent of the population has, for the past several decades, made up only 2.25 percent of the total income (Levine, 2012). This is a backward trend compared to forty years ago, when middle and working class families were expected to have higher incomes than their parents. (Archibald & Feldman, 2011).

If the United States wishes to remain competitive in the global market, it must address its citizens' economic inequalities, particularly amongst its minority populations. The economic situations of many minorities are worsening even within the middle class (Isaacs, 2007). A report from the Bureau of Labor Statistics shows that only 31 percent of middle class African American children are successful in earning incomes higher than their own parents whereas, 68 percent of their Caucasian counterparts have greater income earnings than their parents (2009). A more recent report shows that among people 25 years and older, African Americans have higher unemployment rates than Caucasians, 4.3 to 8.9 percent for males, and 4.0 to 7.1 percent for females (2014). It appears that one's level of education is the largest determinant of wage differences and continuous and sustainable employment amongst individuals (Baum, Ma, & Payea, 2013; Cook & Cordova, 2006; Hotchkiss & Shiferaw, 2010). In 1979, the average salary of a college graduate was 33 percent higher than the salary of a high school graduate (Archiblad & Feldman, 2011). By 2011, the income gap between college degree holders and high

school diploma holders has grown to 74 percent and continue to grow steadily each year (Baum, Ma, & Payea, 2013).

Meritocracy, or the rewarding of individuals selected based on their ability, undergirds colleges and universities use of grades and test scores for admitting students (Archibald & Feldman, 2011; Leonhardt, 2005). Many U.S. citizens believe hard work and talent is more important than where one is born overlooking the role merit plays in obtaining postsecondary opportunities. Scott & Leonhardt (2005) argue "merit has replaced the old system of inherited privilege, in which parents to the manor born handed down the manor to their children" (p. 4). However, merit, it turns out, is at least partly class-based. Parents with money, education, and connections cultivate in their children the habits that the meritocracy rewards. When their children then succeed, their success is seen as earned.

Consequently, the nation must consider the extremely unequal educational experiences of its students. An inadequate education perpetuates social stagnation and intergenerational poverty. Families caught in this cycle are unable to provide quality educational experiences for their children, and therefore, no opportunities to demonstrate merit based behaviors. Merit, therefore, could be related to social class rather than individual efforts. Amherst College President, Anthony Marx (2003-2011) states:

The great colleges and universities were designed to provide for mobility to seek out talent. If we are blind to the educational disadvantages associated with need, we will simply replicate these disadvantages while appearing to make decisions based on merit (2005).

The false dogma that individual merit is not linked to social class allows for socially acceptable discrimination based on educational credentials (Murphy, 1988).

Others may view the lack of education as a personal fault instead of a societal flaw. Such views ignore the fact that a huge determining factor of how well an individual student may achieve in school depends on the community in which he or she resides.

In the United States, one's academic success may be dictated at birth depending on his or her social class. The chance of attending a high quality school is much higher for wealthy students than for poorer students (ACT, 2013; Noguera, 2003). Accordingly, success in school remains tightly linked to social class. Public school districts draw their students from the residential areas that surround them. Families with similar incomes chose to live in similar areas separating themselves from less wealthy districts. Wealthy districts can pay their teachers and administrators well, offer their students better academic resources, and in return, experience more support and engagement from their parents. Many of these parents, who themselves have reaped the benefits of post-secondary education, often engage their children in educational activities, spend hours reading to their children, and stress from an early age the importance of attending college (Friedman, 2007; Lareau, 2011; Leonhardt, 2005).

The gap between what public schools can offer their students seems to have grown larger as many affluent families segregate themselves from the poor (Cashin, 2005). A property tax based system cannot provide an equal education to all its citizens. In the United States, a student's social class becomes a better predictor of school performance when compared to countries such as Denmark, the Netherlands, or France who offer the same education to all citizens (Scott & Leonhardt, 2005; Thernstorm &

Thernstorm, 2003). This flawed social division will not aid the country in its fight to remain at the top of the economic ladder.

Since some low-income students begin their college careers academically unprepared, they are less likely to earn a college degree. Graduation rates are often lower at colleges that admit low-income students when compared to institutions where less lowincome students attend and nearly all students graduate. Small private colleges, major state universities, and elite colleges grant admissions to more of the nation's students from the top income bracket. Research conducted by the National Center of Educational Statistics indicated that only an estimated 26 percent of low-income students earned a four-year degree in six years compared to 56 percent of their high-income peers (2011). Compared to public or state colleges and universities, selective and elite institutions also contribute to the income gap. Graduates of such private institutions tend to have higher earning potential immediately following graduation compared to graduates of less selective colleges. (Engstrom & Tinto, 2008; Espenshade & Radford, 2009; Hotchkiss & Shiferaw, 2010). Such elite colleges often disproportionately select larger numbers of high-income students. Although these selective colleges regularly advertise scholarships and incentives for low-income students to apply, the students often do not have the necessary test scores to meet admission requirements and the scholarships are unutilized (Alon, 2009). Scott & Leonhardt (2005) surveyed 250 of the nation's most selective colleges and found that the number of students from higher income families achieved higher SAT and ACT test scores than many of their low-income peers. When institutions place greater emphasis on higher test scores, more affluent students are more likely to be admitted. Lower income students are often excluded from admission because of lower

SAT and ACT scores hence the selection process perpetuates income inequalities and diminishes poorer students' ability to improve their socioeconomic status.

As the United States' population changes and the percentages of African American, Hispanic, and Caucasian students drastically shift, the way in which the nation educates its young people will have enormous cultural, economic, and social importance for the well-being of the entire country (Chen & DesJardins, 2010; Fry & Gonzales, 2008; Orfield, 2000; Orfield & Lee, 2007; Orfield, Losen, Wald & Swanson, 2004). The nation's commitment to providing an equal and quality primary and secondary education to all of society's young population be should be readdressed. Otherwise, the country may be perpetuating the cycle of poverty creating an underclass of poor, unskilled, uneducated, and unhappy individuals. The promises of *Brown vs. the Board of Education* and President Johnson's War on Poverty have both failed as schools are more segregated now in 2015 than they were in 1968 and 22 percent of children are living under the poverty line (National Center for Children in Poverty, 2014; Orfield, 2001). The nation cannot afford to give up these social and educational initiatives.

Purpose of Study

The primary motivation for this case study is to uncover the practices college access centers use to affect students' aspirations and matriculation into colleges and universities. The number of students attending institutions of higher learning has generally increased since the 1970s. However, higher income students continue to outpace their lower income peers in college enrollment and college completion. The National Student Clearinghouse reported that 70 percent of higher income high school graduates enrolled in college immediately following graduation compared to 50 percent

of low-income high school graduates (2013) Such statistics suggest that the existing programs and policies are not accomplishing their intended mission. A wide variety of college access programs are in place to assist first generation, low-income, and minority students make the transition from high school to college, yet little is known about which program practices work best to support a student's matriculation into college (Engberg & Wolniak, 2010; Gandara, 2001; Harvill, Maynard, Nguyen, Robertson-Kfraft, & Tognatto, 2012). Highlighting best practices and specific program elements that assist students transitioning into college or postsecondary school could greatly dissipate the disparities in college enrollment based on socioeconomic status, race, and ethnicity (Perna & Thomas 2008; Tierney & Vegegas, 2009). Therefore, it becomes extremely important to understand the methods and strategies that are effective for increasing the college going rates and greater representation of minority and low-income youth in colleges and universities.

Research Questions

The study addresses three research questions. They are:

- 1. To what extent, if any, are college access programs effective in creating opportunities for low-income and first generation students to matriculate into college?
- 2. What best practices do college access advisors use to help low-income and first generation students decide that post-secondary education is attainable?

3. What evidence, if any, exists to document positive college going attitudes for students and teachers in a school with college access programs?

Definition of Terms

<u>College Access Program</u> – A program aimed at enhancing and supplementing a school's college going activities to assist primarily low-income, minority, and/or first generation youth who otherwise may not be able to attend college (Tierney, Corwin, & Colyar, 2005).

<u>College Going Culture</u> – An environment within a school or program that embraces and promotes college going practices such as providing a rigorous academic curriculum, maintaining high academic expectations for all students, and supporting students throughout the college application process. Educators within the school or program expect that all students will seek postsecondary education. (Corwin & Tierney, 2007). <u>College Going Rates</u> – The number of students matriculating from high school into postsecondary school any given year (Newbaker, 2013).

<u>College Readiness</u> - The readiness level or preparation a student needs to have in order to enroll and succeed, without remediation, in a credit bearing general education course at a post-secondary institutions including two or four-year colleges, trade schools, or technical schools (ACT, 2010; Conley, 2007).

<u>Cultural Capital</u> – Pierre Bourdieu's description of assets, such as education, dress, intellect, physical appearance, and style of speech, that lead to social mobility beyond one's financial means (Bourdieu & Passeron, 1977).

<u>Cultural Reproduction Theory</u> – The intergenerational transference of cultural norms and values between parents and children (Bourdieu, 1984).

<u>Financial Aid</u> – Federal Pell grants, Stafford and Perkins unsubsidized and subsidized loans, and work-study are the major types of aid offered by the federal government (HCM Strategists, 2013).

<u>First Generation College Bound Student</u> – A student whose parents or legal guardians have not completed a bachelor's degree at a four-year college or university. These students are often low-income and/or minority students with high aspirations and little knowledge of the steps necessary to obtain entrance into a college or university (Avery & Kane, 2004; Davis, 2010; Roderick, Nagaoka, & Coca, 2011).

<u>General College Knowledge</u> – A term that encompasses the understanding of what going to college means, what academic preparation is necessary to gain acceptance, and what steps are needed to complete applications, enroll, and to finance post-secondary education (Conley, 2007; Schneider, 2007).

Meritocracy – The ideology behind the American belief that an individual ascends the social and economic ladder based on his or her ability and not his or her family or place of birth. One is rewarded based on their talents and abilities (Archibald & Feldman, 2011; Gelman, 2014).

<u>Social Capital</u> – James Coleman defined social capital as the relationships and networks among individuals. Higher social capital leads to socially acceptable behaviors, dress, and language and can be responsible for one's social class to remain status quo or lead to social mobility depending on the technical, cultural, and political capabilities of your network (Bourdieu, 1986; Coleman, 1988).

<u>Social Trust</u> - One's belief in another's ability to be honest, to be reliable, and to act with integrity (Rothstein & Uslaner, 2005; Schneider & Byrk, 2004). In this study, social trust refers to the trust built between advisers and college bound students.

Significance of Study

The belief that hard work will lead to the "American Dream" is quickly fading into the backdrop of American history. As schools become more segregated, the idea that separate education is inherently unequal seems to be ignored or forgotten. Residential segregation particularly affects low-income and minority public school students. The gaps in resources place low-income students at a great academic disadvantage and drastically impair their chances of obtaining postsecondary education. Researchers have found that by age 17, the average African American student is four years behind his or her Caucasian counterparts in reading, math, history, and geography (ACT, 2013; Thernstrom and Thernstrom, 2003). The startling academic differences amongst the races directly affect the number of African Americans attending colleges and universities.

All students, including underrepresented racial/ethnic minority students and students from lower income families should have access to a quality college preparatory education. Such an education should include a rigorous curriculum that prepares students for academic achievement at the college level. In addition, students need to receive better guidance and counseling on how to transform their educational aspirations into realistic and executable postsecondary plans. Public education was designed to provide the opportunity for social mobility in a free democracy. Instead, it seems to covertly perpetuate class inequality. The tremendous task of leveling the economic playing field

continues to fall on the nation's public school systems that are so often lacking the resources to do so.

It is worth noting that income and educational inequality have become popular topics of discussion in the United States. Moreover, Americans chose *Capital in the 21st Century* by the economist Thomas Picketty to be number 4 on the *New York Times Bestseller List* (2014). In his book, Picketty predicts inequality will continue to worsen unless large economic changes are made. While the incomes of the top 10 percent grow larger every year, the middle and working classes find that they are more likely to remain in the same class they were born into and without equal opportunities for higher education.

In addition, studies conducted by Dohm & Shniper (2007) and Carnevale, Smith, and Strohl, (2010) project that the fastest growing occupations, such as computer software engineers and elementary school teachers will require some form of training beyond high school. Postsecondary education could include apprenticeships, trade schools, and two-year community colleges, yet most often will require a four-year college degree. Increasingly, available work requires higher and specialized skills not learned "on the job." The remaining jobs in the low skilled sector may have little to offer workers in terms of a living wage or career and training advancement (Lee & Mather, 2008). Fewer and fewer occupations may be able to be mastered while on the job and work with on the job training may be low paying with little room for economic advancement (Bureau of Labor Statistics, 2013). The difficulty of climbing the economic ladder can have a detrimental effect on our society.

Societal benefits of a higher educated population reach beyond economics. Research shows that college graduates more readily assimilate themselves into a complex global society and embrace social norms that reproduce the necessary social, economic, and cultural capital for active citizenship compared to individuals who do not matriculate into postsecondary school (Baum, Ma, & Payea, 2013; Bourdieu & Passeron, 1977; Dougherty, Mellor, & Smith, 2006; Gillen, Selingo, and Zatynski, 2013; Kirsch, Braun, Yamamoto, & Sum, 2007).

Limitations of the Study

First, the case study only analyzes college access programs within one high school. Therefore, the practices and successes of these programs are limited to a single population of students. For example, the practices that produce successful college going outcomes may be effective within this high school and this specific population of students but not be as affective in other schools. Therefore, the conventions discovered through this research process can only be applied to this one high school within this one context and the possibility of developing generalizations or theories to be applied to other college access programs is not applicable. Nonetheless, the participating school has five diverse college access programs providing the study with an abundance of data.

Although some of these programs interact with the district's junior high population, the study will remain focused on the programs functioning at the high school level.

Another delimiting factor of this study is time. Ideally, college access advisors would be observed from the commencement of the 2014-2015 school year and continue to be observed throughout the entire academic year. The setting of the study is the second and third quarters of the 2014-2015 school year, which will allow the researcher to

examine closely the way in which college advisors guide and encourage first generation students throughout the college going process. The role of college access advisors and the financial aid process can also be observed during this period. A longer period of study may more accurately evaluate the components of programs and best practices of advisors that lead to college matriculation. However, the nature of college access programs often leave advisors with crammed schedules and a continual flow of students seeking guidance. Therefore, six total hours of observation with each advisor seemed feasible for all participants. In addition, the second and third semesters are when most colleges encourage students to begin the application and financial aid processes therefore, the fall and spring will provide richer observation experiences.

Chapter 1 Summary

This chapter has discussed the importance of insuring equal access, equal opportunity, and equal preparation for postsecondary school for students of all races and income levels. If the United States wishes to remain at the top of the economic ladder and fully participate in the global economy, America's public schools, colleges, and universities must educate all students equally. Furthermore, the gates that keep students trapped in poverty must be unlocked to offer a real chance at advancement and achievement. The mission of college access programs is to remove barriers to advancement and to encourage students to engage in a process that is often unfamiliar to themselves and their families.

In the next chapter, the barriers to college and the effects of meritocracy are discussed. Additionally, pertinent literature related to social and cultural capital, social trust, self-efficacy, and the nature of college access programs are reviewed.

CHAPTER 2

REVIEW OF THE LITERATURE

Education is the great equalizer in our nation. It can bridge social, economic, racial, and geographic divides like no other force. It can mean the difference between an open door and a dead end. And nowhere is this truer than in higher education.

~ John A. Boehner and Howard P. McKeon (2003)

The motivation behind this evaluative case study is to identify the effects of college access programs on students' aspirations and matriculation into postsecondary institutions. The majority of college access programs are housed within schools that primarily educate low-income students who may or may not be first generation college bound. Often, these schools are in urban neighborhoods where postsecondary education or gainful employment is not the norm, which will be discussed in detail later in the chapter (Evans, 2004). Chapter 2 begins with "Leveling the Playing Field" which highlights the gap between low-income and minorities' college attendance and completion rates compared to their more affluent peers. "Competing in a Global Economy" follows, which illustrates the negative consequences of a school's apathetic attitude toward college attendance followed by a thorough overview of the realities of urban schools and their academic disadvantages. An exploration of the significance of cultural capital in education and the relation of capital to the idea of merit follows. The chapter proceeds with a discussion of Bandura's (1994) idea of self-efficacy and Schneider and Bryk's (2004) usage of social trust theory in relation to trust in schools and how trust is used to build social capital. The chapter continues with an overview on the

focus of college access programs and the components necessary for matriculation into college or postsecondary school. The chapter concludes with a summary of current college access programs and includes explanations of different types of program components and services.

Leveling the Playing Field with Education

Many view the landmark Brown vs. The Board of Education (Brown vs. Board, 1954) Supreme Court Decision as a watershed moment in American education and history in general. The decision to rule that segregation of education was unconstitutional changed the plight of hundreds of thousands of minority students allowing them equal access to public education. Nearly 60 years after Brown, 68 percent of African Americans and 76 percent of Latino students are graduating from high school with their Caucasian peers who are just slightly ahead at 81 percent (National Center for Education Statistics, 2011). Studies show that since the Brown Decision, obtaining a high school diploma has become commonplace for American students regardless of their ethnicity or race. Unfortunately, obtaining a bachelor's degree is not such a common occurrence, especially for the nation's minority and low-income students. When it comes to earning a degree at the postsecondary level, a substantial gap persists for racial and ethnic minorities as well as low-income students. A recent study conducted by Carnevale, Smith, and Strohl (2013) on postsecondary enrollment trends showed that 82 percent of new white college bound students attend four-year colleges and universities where as 72 percent of new college bound Hispanic students and 68 percent of new college bound African American students begin their education at a two-year community college. Although the aspirations for college and professional employment are present, minority

and low-income students often struggle to actualize their ambitions at a four-year college or university (Baum, Ma, & Payea, 2013). One's race or socioeconomic status still greatly predicts one's chances of earning a college degree (Noguera, 2008; Reardon, 2011; Scott & Leonhardt, 2005).

Competing in a Global Economy

In the ever-changing global economy, advanced degrees are more important than ever. A high school diploma does not guarantee a graduate substantial and steady employment or a life free of government assistance. Employment projections show that most jobs in the next five to ten years will require a bachelor's degree (Carnevale, Smith, & Strohl, 2013). The American higher education system presently, is the institution responsible for either providing or denying one's access to wealth, power, and status, and will either provide new opportunities or perpetuate the existent social inequalities (Marina & Holmes, 2009). Education beyond high school is necessary to obtain a lifestyle that is secure and rewarding. The United States is becoming a nation divided by economic opportunity because obtaining adequate education is not readily possible for all.

China, India, and South Korea are rapidly sending their top students to American colleges and universities (Friedman, 2007). American students, therefore, must compete against larger populations of students to be admitted into the colleges of their choice. If the United States hopes to remain on top of the economic ladder, it must quickly find a way to provide higher levels of education for much of its population.

For example, the number of American college students earning science degrees has fallen to 17th in the world. Yet, the number of jobs requiring science related skills

increases almost 5 percent each year (National Science Foundation, 2004). Therefore, United States companies unable to find enough qualified American college graduates often perform global searchers to fill many of their higher skilled positions.

In this highly competitive job market and unstable economy where a well paying job requires a college degree, the question of who is granted access to postsecondary educational institutions is more important than ever. Because of the changing economy and the stagnant achievement gap, college readiness and enrollment have become the "No Child Left Behind" of the second decade of the Twenty First Century. The Department of Education is now pouring resources into building data collecting systems that will link high school and postsecondary school performance, which will include college readiness indicators that highs schools will be responsible for implementing (Roderick, Nagaoka, & Coca, 2009). Promoting college enrollment will become the necessary norm for all high schools regardless of their student body's race or socioeconomic status (Engberg & Wolniak, 2010). Furthermore, the importance of earning a college degree will unfortunately coincide with two noteworthy trends: the rapid rise of college tuition and the inflated emphasis of college entrance exams, two factors that negatively and disproportionately affect low-income, minority and first generation students (Alon & Tienda, 2007; HCM Strategists, 2013).

Public Education in the United States

First- generation and minority college bound students require special support and attention to gain access and acceptance into an institution of higher education. Even though the number of African American students attending college right out of high school has increased 18 percent between 1980 and 2005, the number of students actually

completing four year degrees has increased by only 6 percentage points (Roderick, Nagaoka, & Coca 2009). Similarly, Hispanic students make up only 9 percent of the total college population in the nation with only 10 percent graduating from four-year colleges or universities (Cabrera et al., 2006; Oseguera, Locks, & Vega, 2009). With completion rates so low, first generation and minority students may need college access support to move on to postsecondary education.

Low-income students also require special support since they too are underrepresented amongst college and university student bodies. The highest achieving students at low-income high schools are enrolling in colleges and universities at the same rates as the lowest achieving students in high income schools (Haycock, 2006). In 2005, 81 percent of students from the top income quintile enrolled into college the semester immediately following high school graduation compared to a mere 54 percent of students entering college residing in the bottom income quintile (NCES, 2011).

Enrollment rates directly affect degree completion rates. In the last several decades, the college completion rate of students from high-income families has grown drastically while the completion rate of students from low-income families has remained stagnant (Bailey & Dynarski, 2011; Baum, Ma, & Papyea, 2013).

Such gaps in college completion rates may lead to significant differences in overall quality of life and in the opportunities low-income students can provide their families (Gandara, 2001; Roderick, Nagaoka, & Coca, 2008). A study conducted by Reardon, Baker, and Klasik (2012) suggests that the disparities amongst low-income, minority, and Caucasian college enrollment data originate from limited academic preparation and unequal economic resources in the schools and communities responsible

for educating the nation's economically disadvantaged and minority populations. The students often attend schools where most are eligible to receive free or reduced priced lunch, score poorly on state standardized tests, and reside in highly segregated communities. Consequently, the desire to earn a college degree becomes a secondary concern compared to the adversity of living in poverty (Blackwell & Pinder, 2014).

Fraser (2001) stated that the construction of a compulsory public education system that would create a nation of informed and assimilated citizens is one of America's most prodigious endeavors. Yet, this same public education system does not educate all citizens equally. It seems that the place of one's birth may determine one's chances of obtaining a quality education. In the United States, to often children are separated by social class, which often leads to separation by race as well (Santow & Rothstein, 2012). Such separation embeds social divisions of inferior and superior citizenship and perpetuates intergenerational poverty disallowing the sharing or movement of social and cultural capital. Reardon (2013) warns that if ways to reduce the increasing educational inequalities amongst children are not found, the American ideology that one can rise through education and hard work may be harder to achieve. Today's children may not have an opportunity to experience the "American Dream." Cashin (2005) echoes this idea by stating, "Any short term gains to the advantaged social classes that benefit from separatism are undermined by the long-term consequences of living in a society in which social mobility and social cohesion may be declining." (p. 124). As the group of individuals in the underclass grows larger, so will the number of Americans who are unhappy, unemployed, and unable to earn a living wage without government assistance.

Realities of Urban Education

"We conclude that in the field of public education the doctrine of "separate but equal has no place. Separate educational facilities are inherently unequal."

Brown vs. Board of Education (1954)

The segregation of public school students by race, found to be inherently unequal, seems to be just as prevalent today as it was in the early 1950s (Cashin, 2005). As the nation moves away from court ordered desegregation plans, students are more often than not attending homogenous schools in terms of both race and socioeconomic status. Sawhill, Winship, and Grannis analyzed census data and found that the number of families living in middle income neighborhoods is declining, but the number of families living in either affluent or poor suburbs is on the rise (2012). Such economic segregation exacerbates and perpetuates the problems of inequality (Cashin, 2005; Gandara, 2002; Neuman, 2013; Orfield & Lee, 2007). American schools may consider revisiting public desegregation plans in the context of segregation's strong correlation to extreme economic and academic disadvantages.

In the United States, one fifth of school age children live under the poverty line, meaning one fifth of the nation's children reside within a household whose income is less than \$23,492 a year (Sawhill, Winship, & Grannis, 2012). These economically disadvantaged students attend schools with disproportionately high concentrations of low-income and minority students (Barnes & Slate, 2010; Marina & Holmes, 2009). African American median household incomes are about 64 percent that of Caucasian median household incomes, which equals out to \$29,000 compared to \$46,000 for whites.

Therefore, two thirds of children attending high poverty schools are African American or Hispanic (Lareau, 2011). Adding to this common demographic is the significant increase of single parent households, particularly single female headed households, who, of all reported subgroups, have the lowest median family income (\$27,244 in 2005) (Archibald & Feldman, 2011). Students attending urban schools in highly segregated neighborhoods may experience immense academic and economic disadvantages beginning at a very early age. The average African American or Hispanic American elementary school student attends a school in which two thirds of their classmates are living underneath the poverty line. Comparatively, the number of Caucasians living under the poverty line is only 30 percent (Cashin, 2005).

Segregated communities often result in segregated schools. Segregation was once viewed by the U.S. Supreme Court, social scientists, and civil rights activists to be the catalyst for the vast educational disparities experienced by African Americans. However, the past thirty years bear witness to major court rulings and public policies that override and ignore the promise of *Brown vs. the Board of Education*. The data collected by Frankenberg, Lee and Orfield's 2003 study, *A Multiracial Society with Segregated Schools: Are We Losing the Dream?* shows that many American schools and school systems are more segregated now than they were during the Civil Rights Era.

Cashin's Four Public Policy Decisions

Cashin (2005) argues that four public policy decisions made in the early part of the twentieth century directly influenced the nation's racially and economically segregated neighborhoods. Institutional segregation began with granting local communities autonomy to create their own school districts with their own rules resulting

in homogenous communities. Next, the FHA or Federal Housing Administration, mortgage insurance program perpetuated the idea that supporting homogeneity or single-family middle class homes was the only way to ensure stable housing value. At the same time, the FHA greatly limited the number of mortgages made available to minority families. Third, the National Interstate and Defense Highways Act, which funded the building of highways and interstates to connect quickly the suburbs to the city, provided an easy escape to the suburbs for whites who worked in the city. These highways walled off and ripped through low-income and minority neighborhoods. Between 1956 and 1966, 330,000 mostly African American families lost their homes to this project, ironically labeled the "Greatest Public Works Project." The policies and programs above, arguably the most detrimental to African Americans, were exacerbated by the implementation of the urban housing development program. The support of federal housing projects, by design and location, has resulted in neighborhoods of concentrated African American poverty and the creation of the "black ghetto" (Cashin, 2005).

The consequences of these policies appear to be evident in current residential patterns that leave African Americans, more than any other group, living in segregated high poverty neighborhoods. Accordingly, the educational opportunities for individuals living in these segregated communities with less tax revenue are extremely restrictive.

History of Urban Segregation

Many of the large urban school systems were once under strict court ordered desegregation plans. However, city school districts like Chicago, Birmingham, and Atlanta, who have experienced a great amount of white flight, are few percentage points from educating minority only student populations. These virtually all minority schools

occupy some of the nation's poorest urban centers where the low-income minority population increases as middle class Caucasians move out to the more affluent surrounding suburbs. This mass exodus from the city, which began in the 1970s, was and still is a major cause for the drastic gaps in the quality of schools attended by urban students. By the 1990s, the nation's 100 largest cities had lost 2.3 million middle class Caucasians and with them their tax base (Cashin, 2005; Massey, 2007). With fewer than 20 percent Caucasian middle class enrollment, city school systems seem to be deteriorating quickly (Hochschild, 2003). Gaps between wages, jobs, and investment gains between African Americans and Caucasians can be quite large directly affecting a school system's tax base. The movement of Caucasians to the suburbs, therefore, has placed an economic strain on city school systems charged with educating a high number of people with low incomes and many children (Cashin 2005; Williams & Collins, 2001). Researchers have found that the hasty retreat from integration was fueled by the federal court decisions and oversight on school desegregation plans beginning in the 1990s. Subsequently, the number of minority students attending predominantly Caucasian majority schools has drastically diminished (Hochschild, 2003). Researchers suggest that such segregation is a major determinant of racial differences in socioeconomic mobility. Such residential environments may create social and physical risks that adversely affect academic achievement (Jackson, 2015; William & Collins, 2001).

Current Segregation Trends

A significant number of schools in America are composed of virtually 100 percent minority students. Frankenberg and others have coined these schools as "apartheid schools" and has found that over 5 percent of the nation's public school enrollment

attends such schools. One sixth of the nation's African American students and one ninth of the nation's Hispanic students attend an "apartheid school" system (2003). The nation's 27 largest urban school systems are virtually all non-white and serve almost a quarter of the country's African American and Hispanic population. The nation's five largest city school systems serve student populations that consist of only 15 percent white enrollment. Since 1980, the Northeast has reported statistics depicting four out of every five African American students attend a school with a predominantly minority population. In the Midwest region, one in every four African American students attends a school that is 100 percent minority enrollment (Frankenberg, 2005). Cashin (2005) found that 65 percent of all African Americans would have to move in order to be equally distributed amongst predominantly Caucasian American school systems.

Individuals living in high poverty segregated neighborhoods or public housing developments are often isolated from employment opportunities, social networks that could lead to potential jobs, and role models of stable employment (Collins, Wambach, David, & Rankin, 2009; Sherraden, 2005; Williams & Collins, 2001). Consequently, they may become locked into intergenerational poverty. Low-income and segregated neighborhoods are often fertile breeding ground for extreme social distress, places where unemployment is the norm and individuals are left purposeless and without the structure of work. Violence and death may be a constant presence, as well as high crime rates and high numbers of teenage pregnancies (Cashin, 2005; Krenichyn, Saeger, & Evans, 2001; Leventhal & Brooks-Gunn, 2000). Hyper-segregated neighborhoods often produce just as many felons as they produce post-secondary students. Statistics show that an African American male has a one in six chance of going to prison before he dies and a five in six

chance of never graduating college. These numbers factor out to be an astonishing one prisoner for every two college students (Boothe, 2007). The legacy of intergenerational poverty, residential segregation, and social distress is so powerfully established that undoing the effects of the ill considered, unfair, and disastrous federal public housing program could take several lifetimes even assuming there is sufficient public will to act. Federal subsidized housing may perpetuate intergenerational poverty since the residents of these programs feed into schools with fewer resources and opportunities for academic success. These students often attend schools that are segregated from other populations consequently, they may have difficulty seeing a successful life beyond their small segregated communities.

Negative Peer Influence

Urban schools and communities are also faced with issues of negative peer influence. James Coleman's (1966) studies showed that a student's social class was the greatest determinant in predicting his or her success in school. Research has found that students not receiving free or reduced priced lunch demonstrated higher levels of academic engagement (Duncan & Magnuson, 2005; Heckman, 2006; Hutchinson & Winsler, 2014). Research has also shown that peers may strongly influence student academic performance either positively or negatively; therefore, students from impoverished backgrounds may be negatively affected when attending schools that are solely or primarily made up of other low-income students (Cashin, 2005; Johnson, 2008). Such students may be trapped in communities with few operating businesses and opportunities to work, and few mentors, male role models, or employed individuals. They struggle to see a future for themselves outside of this environment and a hopeless

attitude can spread insidiously throughout the school and neighborhood (Ceballo, McLyod-Devey, & Toyokawa, 2004; Roscigno, Tomaskovic-Devey, & Crowley, 2006). Whereas, students who experience interaction both informally and in the classroom with peers from diverse backgrounds demonstrated many positive learning outcomes such as engagement in academic activities, active thinking processes, growth in intellectual engagement and motivation, and growth in intellectual and academic skills (Frankenberg, Lee, & Orfield, 2003; Hochschild, 2003; Pettigrew & Tropp, 2006). In addition, Engberg and Allen (2011) found that students with more friends who are attending two and four year colleges were significantly more likely themselves to also attend two or four year colleges. Students segregated in both their community and school may be deprived of these important opportunities for social and intellectual growth.

Low levels of student competition and motivation, regardless of the race of the student body have also been linked to poor schools within high poverty neighborhoods (Borman, 2004 Frankenberg 2007). Leonhardt (2005) suggests these attitudes manifest from the reality that low-income students often must work to support their families or support themselves. Putting time and effort into schoolwork instead of working may seem counterproductive to their economic advancement.

Transient Student Population

Transience is another hurdle faced by many of the nation's city school systems.

Current housing patterns show that 55 percent of disadvantaged students live in the same house for no more than three consecutive years (Black, 2006; Fordham Institute, 2012; Wight & Chau, 2009). In addition to academic differences, residential mobility is linked to negative changes in family dynamics such as parental job loss, divorce, eviction,

abuse, and substandard housing (Black, 2006; Buckner, 2008; Hanushek & Raymond, 2003; Samuels, Shinn, & Buckner, 2010). Crowley asserts that African Americans move much more frequently than Caucasians, and they are more likely to attend schools where a transient student body is the norm (2003). Both factors can negatively affect academic achievement for transient students.

Moving to a new school, especially in the middle of the school year, has clearly demonstrated to affect negatively both the new students and the current students within the school socially and academically. Indeed, transient students often have difficulty forming positive relationships with teachers, and peers and may have difficulty assimilating into a peer group. Such students often have negative attitudes towards school and may demonstrate overly defensive and aggressive behaviors, which cause disruptions in and outside of class (Sanderson, 2003; Stahl, 2010). Academically, teachers continuously have to balance integrating new students into their class while trying to maintain their normal course structure and procedures. Maintaining high performance expectations for all students is often a struggle (Goldrick-Rab, 2006; Sanderson, 2001). Overall, the educational differences between transient and non-transient students greatly contribute to the lower average achievement of schools with a transient student body (Fantuzzo & Perlman, 2007; Hanushek, Kain, & Rivikin, 2004).

Students who move often have a fractured and weak educational foundation making it hard for them to meet grade level expectations. They may not be in school for a complete academic year; consequently, their academic growth is limited. As a result, transient students are poor test takers and score considerably lower on state standardized tests than their more stationary peers. Research also shows that transient students have

an increased likelihood of dropping out of high school (Black, 2006; Fordham Institute, 2012).

Drop-out Factories

The National Center for Educational Statistics reported that one in five high school students dropped out of high school during the 2009-2010 academic year (2013). Further, the majority of these students came from lower socioeconomic families, were African American or Hispanic, and attended urban high schools within a major city. As a result, the drop out epidemic among inner city students and urban districts, or "dropout factories" has become the epicenter of dropout prevention programs. Such programs may also add to the decline of urban students' academic preparation. Alternative schools, residential treatment facility schools, schools, schools-within-schools, and GED programs show improvements when it comes to retaining urban students but do little to advance their academic achievement or college preparation (Balfanz, 2009). These students may be staying in school and earning their diplomas but are often minimally prepared to attend college or postsecondary school.

High Instances of Mental, Physical, and Social Health Issues

More so than their middle class and wealthy peers, low-income students suffer from a disproportionate amount of social distress such as physical abuse or neglect (Berger, 2004; Currie, 2005; Evans, 2004; Evans & Kim, 2007). These same students are also more likely to go undiagnosed with cases of physical or mental illness. Social distresses significantly interact with students' academic achievement. Nikulina, Widom, & Czaja (2011) found that neglected low-income students living in high poverty neighborhoods reported more instances of Post Traumatic Stress Disorder and Major

Depressive Disorder than their higher income peers. Such mental health issues can result in behavior problems, cognition issues, and overall school disconnectedness that adversely affect academic achievement (Burkam, Lee, & Dwyer, 2009).

Many of the health issues students of lower socioeconomic status suffer from are avoidable and are issues that may not affect middle class students. Low-income youth disproportionately suffer from undiagnosed vision problems (Basch, 2011), tend to have more untreated ear infections and hearing loss issues (Menyuk, 1980), higher incidences of asthma (Gottlieb, Beiser & O'Connoer, 1995), and greater exposure to lead (Sargent et al., 1995). All these ailments can affect academic performance in terms of retention, reasoning, and memory (Jensen, 2013).

Urban Academic Disadvantages

Lack of Resources in High Poverty Schools

Socioeconomically disadvantaged students often come to school both academically and socially disadvantaged more so than their middle and upper class peers. Since low-income students have greater needs, the schools they attend must provide resources beyond those of a typical school. Despite additional monies, such as Title I funding, schools in high poverty areas struggle to help students overcome academic deficits. Research has found that when two thirds or more of a student population lives under the poverty line, the majority of students attending that school perform below basic on national standardized tests (Ryan, 1999). High poverty schools may increase educational inequality among their student population. Problems such as limited resources of the districts and communities supporting the schools, unqualified and inexperienced teachers, lower parental involvement, and higher teacher turnover, all

contribute to lower quality schools (Carey, Betts, Rueben, & Danenberg, 2000; Cashin, 2005; Farmer-Hinton, 2008; Frankenberg, Lee & Orfield. 2003; Sanbonmatsu, Kling, Duncan, & Brooks-Gunn, 2006). Unfortunately, the students who need the most resources and best teachers to keep up with their more affluent peers are likely attending schools with the least resources and the most unqualified educators.

It is conceivable that funding for educating students in urban schools should be greater to meet the needs of educating the large number of disadvantaged students (Cashin, 2005). Low-income and minority students are disproportionately attending underfunded schools with large class sizes, outdated curricula, overwhelmed teachers and few extracurricular programs. Such educational deficits leave students minimally prepared for college (Farmer-Hinton, 2002; Johnson, 2008; McDonough, 2004; Noguera, 2003). A study conducted by the ACT found limited academic preparation, resources, and teacher attention to be significant barriers for minority students and their matriculation into postsecondary school. Using the college readiness indicators on the ACT, researchers found that half of Caucasian graduates met their academic requirements as incoming college freshman compared to less than one quarter of Latino and African American graduates (2010). Academic deficits can directly affect student's options and opportunities upon graduation from high school.

Under Prepared Teachers

Minority and low-income students are more likely to attend schools with less qualified teachers who may lack teacher certification credentials from a college or university. Even if certified, teachers in high poverty areas are often placed teaching a grade level or subject area that they are not certified to teach (Farmer-Hinton, 2008;

Kozol, 1991). Ferguson's research on teacher quality found that a teachers' certification test scores (Praxis) often help predict their students' achievement. Consequently, teachers who score higher on their certification exams produce students who score higher on their standardized exams (2000). Ferguson also found that the teachers with the lowest certification scores were teaching in predominantly African American and Hispanic schools (1991). Teacher quality, therefore, may contribute to the racial achievement gap.

Teacher attitudes and cultural responsiveness in high poverty and predominantly minority schools can also affect the racial achievement gap. Some studies suggest that as the number of minority students within a school increases, the teachers expectations of their academic abilities decrease (Ferguson, 2000; Lewis, 2003; Ogbu, 2003). Wildhagen (2012) found that these limited expectations substantially contributed to a large racial gap in unrealized academic potential between African American and Caucasian students. Such gaps were found to contribute to differences in postsecondary enrollment between the two groups.

Teachers are almost as transient as the students are in inner city high poverty schools. Kozol noticed this to be true in his study of New York City Public Schools, citing P.S. 65 as a prime example. This elementary school began the year with twenty-eight first year teachers out of a faculty of fifty. Over the course of the school year, half of these teachers resigned or were fired (2005). Other urban school teachers, once they have acquired enough experience, clamor to leave the undesirable conditions of urban schools, leaving vacancies that are often occupied by other less qualified and

inexperienced teachers (Frankenberg & Orfield, 2007). Those students who need the best of the profession often instead receive the inexperienced and under qualified educators.

Focus on Testing vs. Critical and Analytical Thinking

High poverty schools often expose low income and minority students to a curriculum that stresses skills needed to pass a state standardized test but may neglect the necessary skills to be successful in college. Highly segregated urban schools have historically struggled to pass state standardized tests and are often the first to be labeled "failing." The consequences of falling under the "failing" label can negatively affect potential college students. Failing test scores often overshadow other measures of academic performance, and therefore, impede students' college prospects.

Administration and teachers place a great deal of emphasis on teaching the skills that the state or region plan to test and often only teach these skills, leaving out a plethora of college preparation skills such as problem solving, analytical thinking, and synthesizing information. Such a narrowing of the curriculum and a lack of authentic intellectual work can be detrimental to a student's ability to strengthen college readiness skills (Jacob, 2003). Teachers spend class time on test preparation and little else. Students are consequently denied learning content and knowledge in other subject areas and are, therefore, less ready for the kind of academic work required in college.

Poor Performance on Standardized Tests

High stakes testing has particularly negative effects on minority students who are faced with the blaring evidence of an "achievement gap" between themselves and their Caucasian and Asian peers. In fact, since the implementation of national standardized testing, the achievement gap has widened (Harris & Harrington, 2006). The standardized

test era has generated what researchers call "stereotype threat" which is academic underperformance due to the risk of confirming negative stereotypes (Appel & Kromberger, 2012). The tests, which were put into place to insure that all students were learning the same material, may have done more to widen the achievement gap, than to close it.

Lack of a Rigorous Curriculum

The college readiness indicators, which are part of the ACT assessment, found a significant racial gap between minority and Caucasian high school seniors. Researchers found that half of the Caucasian graduates in the study met their academic requirements when entering college compared to less than one quarter of Hispanic and African American graduates (ACT, 2010). Therefore, access to college begins within the context of one's high school experience and the rigor of the school's curriculum including the number of Advanced Placement (AP) and college preparatory courses offered. Too many students, particularly students of color and students from lower income families, are not taking the proper courses to gain college acceptance or prepare them for the rigors of college.

Students taking advanced placement, international baccalaureate, and dual enrollment classes are far more likely to attend college than students taking less challenging classes. A study conducted by the National Center for Educational Statistics (NCES) showed that students of higher socioeconomic status were three times more likely to have taken an AP course compared to their lower socioeconomic peers (2012). In addition, Ford and others found that African American students, regardless of income are also underrepresented in AP courses (2008). Farmer-Hinton observed that students of

color and low-income students disproportionately attend schools that do not even offer AP or college preparatory classes (2002).

The act of achieving success in a rigorous academic classes in high school often translates to achieving success at a college or university. In addition, students who participate in rigorous college level classes while in high school are more likely to attend college the fall immediately following high school graduation. These students are also more likely to remain in college for two or more consecutive years, earn a B or higher in first year college classes, and earn a 3.0 or better GPA (ACT, 2010). Furthermore, students who take biology, chemistry, and physics as part of their high school course work are more likely to enroll in college the fall following graduation and re-enroll in the same college their second year (ACT, 2010).

The differences in curriculum directly affect minority and low-income students' ability to gain acceptance into a college or university. Research shows that urban students of color and students who are economically disadvantaged are disproportionately represented in lower track non-college prep classes. Once placed in a lower track, rarely do such students ascend to a higher tracked class excluding them from the academic preparation necessary for college (Noguera, 2003). Such categorizing and labeling practices may perpetuate generational poverty by locking low-income and minority students out of the higher education system and limiting them to low paying semi-skilled jobs leaving them trapped in the cycle of poverty.

Purpose of Public Schools

A curriculum lacking in academic rigor is only a fraction of the vast inequalities that students face in many urban schools. Students attending high poverty schools may

have little exposure to positive role models who embody college success. They also may not have parents with the confidence to challenge the educational system and advocate for their needs. Minimal exposure to the cultural capital successful students need to apply, be accepted, matriculate, and graduate from a four year college is a paramount factor in the disproportionate absence of minority and urban students from the nation's college campuses. Bourdieu (1973) defines cultural capital as abilities, knowledge and skills that certain groups in society inherit or possess. Most often, a family passes cultural capital from one generation to the next, which suggests that families from lower socioeconomic backgrounds do not have the privilege of acquiring the cultural capital that families from higher socioeconomic backgrounds may possess. As a result, intergenerational poverty prevails.

The appalling lack of resources in urban K-12 schools, the negative influence of the surrounding neighborhoods, and the severe inequality of intergenerational cultural and social capital can paralyze urban youth's chances of going on to college or postsecondary school. Public schools were the product of the ideology that there should be one institution in American society that could provide a common experience and equal opportunity regardless of who one's parents were or where one was born. The *Brown* decision reminded Americans of this promise. Yet, the promise of equal and integrated educational opportunities seems to be far from a national reality. We are currently a nation that often cannot even guarantee "separate but equal" opportunities for all students. Such failures result in a social sorting where the most significant indicator of one's future success is not how hard one works but to whom and where one is born.

Social and Cultural Capital and Education

"The very texture of an individual's daily existence, and ultimately his or her life chances, is fundamentally shaped by structured and accumulated opportunities for entering multiple institutional contexts and forging relationships with people who control resources and who generally participate in power."

~ Stanton-Salazar (2001)

Free and appropriate public education for all students has been one of the nation's largest endeavors. Yet, the disparities between the school systems have long lasting effects. Many of the Nation's students not only lack access to quality teachers, educational resources, and rigorous curriculum, but also often lack stable housing, basic nutrition, and access to educational resources outside of school (Currie, 2005; Massey, Charles, Lundy, & Fischer, 2003). Such students remain socially and economically beleaguered at the bottom of the income ladder (Engberg & Allen, 2011). Without access to postsecondary education, low-income students may lack the skills and credentials for employment that would earn them more than the minimum wage. Perna & Titus (2005) link the lack of access to higher education to low-income students' lack of cultural and social capital. Bourdieu's theory of cultural reproduction that includes social and cultural capital is further explained below.

Bourdieu and Cultural Capital

An individual's cultural capital is difficult to measure since it is not something that is tangible. Bourdieu and Passeron (1986) define cultural capital as an "institutionalized or widely shared high status cultural signals (attitudes, preferences, formal knowledge, behaviors, possessions, and credentials) used for cultural and social

exclusion from jobs and resources and the latter to exclusion from high status groups" (p. 158). The transmission of educational aspirations from family and friends, involvement in cultural activities not related to school, and frequent discussions with parents and family about the possibility of college all contribute to one's cultural capital (Massey, Charles, Lundy, & Fischer, 2003; Perna and Titus 2005; Petty, 2013).

Bourdieu (1973) proposed that individuals acquire capital throughout childhood within the family. Children emulate the behaviors and attitudes of those within their social context. Families demonstrate specific linguistic and cultural competencies and familiarity with culture. Such cultural capital translates into conventions of school success, and therefore, children from middle and upper class families often perform better and do take advantage of educational opportunities more often than their less fortunate lower class peers. As an example, studies show that there is a 150-point gap on the SAT between those children whose parents have a professional degree and those whose parents are high school dropouts (Lareau, 2011). Socially elite parents transmit cultural capital, not taught in schools to their children, which in turn greatly contributes to the perpetuation of social class inequality (Bourdieu, 1973; Gillen, Selingo, & Zatynski, 2013; McDonough, 1997). Middle and upper class students, because of their cultural capital, place a greater value on earning a high school diploma and a college degree. These families also demonstrate optimism about their ability to be admitted to college, obtain prosperous employment, and become homeowners. These findings were consistent across race and gender lines, (Matthew, 2011). Lower class students, however, may place a different and less significant value on obtaining an advanced degree. They also may lack the necessary knowledge and information about the lifetime benefit of

higher education (Gillen, Selingo, & Zatynski, 2013; McDonough, 1997; Perna & Titus, 2005).

Bourdieu explains social capital, which sometimes overlaps cultural capital, as the people and community resources that can enhance one's life through coordination and cooperation benefitting both parties. One's social capital also affects his or her desire to attend college. Social Capital as it relates to college access may include parent involvement in schools, peer influences, both positive and negative, and college awareness and networks (Farmer-Hinton, 2008; McDonough, 2005; Savitz-Romer, 2011). Researchers argue students with limited access to strong social networks and individuals with social capital have minimal postsecondary options compared to peers who, through strong college going social networks, are exposed to a variety of college going options (Bell, Rowan-Kenyon, & Perna, 2009; Farmer-Hinton, 2008; McDonough, 2008). Parents of higher family income are more able to provide their children with both tangible resources and college going knowledge and often structure their children's activities in educationally more meaningful ways. These experiences provide higher income children with the social and cultural capital beyond the capital gained in a traditional classroom (Funkhouser & Gonzales, 1998; Lareau, 2002; Perna, 2005). In today's society, increasing student's cultural capital and social mobility usually occurs by graduating from high school, enrolling in college, and obtaining a bachelor's degree, all of which can be passed on to future generations through cultural reproduction (Balfanz, 2009; Berliner, 2006; Kirsh, Yamamoto, & Sum, 2007; Ravitch, 2010; Roderick, Nagaoka, & Coca, 2009; Zhao, 2009).

Bourdieu's cultural reproduction theory, or the theory of passing cultural capital from one generation to the next, is relevant to college readiness rates. The parents' level of education, learning, and occupational and social success may be a primary influence on their children's academic success (Bourdieu, 1976; Bourdieu & Passerson, 1990; Fasang, Mangino, & Buckner, 2010; Jennings & Lynn, 2005; Lareau & Horvat, 1999; Silva, 2001). Consequently, students born into lower socioeconomic families surviving on public assistance may be at a perpetual disadvantage compared to their middle and higher class peers because of the cultural capital attainment disparity of their parents and their lack of cultural reproduction (Bourdieu, 1967; Bourdieu & Passerson, 1979; Dumais, 2002; Robbins, 2005; Silva, 2001; Webb, Schirato, & Danaher, 2002).

Parenting Differences between Classes

The different social and cultural opportunities a student is provided greatly stems from his or her family's parenting style. Through an ethnographic study of eighty-eight African American and Caucasian families, researcher, Annette Lareau, identified two distinct parenting styles. Most often, social class grouped the parents into using one style or the other. She labeled the middle class parenting style "concerted cultivation," and the working, and poor class parents' style "natural growth." (2011). The two styles can have a major impact on how a student interacts in his or her educational and social environments.

Middle class parents.

Middle class parents tend to play an active role in shaping their children's interests by constantly engaging their sons or daughters in discussion of current affairs. Such parents seek out extracurricular activities to build their children's 'talents. They

encourage them to speak up and ask questions when in school or in other public settings and they often engage their children in conversation (Lewin, 2005; Putnam, Frederick, & Snellman, 2012). Lareau (2011) refers to this process as concerted cultivation. Through this process, a sense of entitlement emerges from within the student. These students are disproportionately high achieving and see academic achievement as a clear indicator of success.

The benefit of growing up under parents who practice concerted cultivation can make the transition from home to school easier for a child. Lareau (2011) found that most teachers in her study favored principles of concerted cultivation and the behaviors associated with it. Concerted cultivation practices at home and at school often mimicked one another and there were not vast differences between behaviors at home and behaviors at school. Because school is often structured like other organized activities such as soccer or dance where there is an adult instructing a student, middle class children adapt more readily to the school setting; consequently, it is middle class cultural practices that set the standard. The conventions of school, for these children, are already the norm, and their success in school places the concerted cultivation method as the optimal parenting style.

Working class parents.

In comparison, Lareau argues, working-class parents usually teach their children, early on, to do what they are told without argument and to manage their own free time. They may not see a reason to elicit the thoughts, feelings, and opinions of the children. This style emulates the popular ideology of the 1950s and 1960s that "children should be seen and not heard." Lareau refers to this style as "natural growth." Therefore, working

class and poor parents seem to raise their children in a way that mimics their own upbringing. Consequently, their children can develop an emerging sense of constraint.

Working-class parents may see no benefit of nurturing their children's abilities or talents. For them, play is just play and does not need the presence of adults. Lareau believes the lack of involvement in organized activities hinders the children's ability to develop school related social skills, such as working as a group or developing leadership skills. The most severe consequence of not providing poor or working class children social opportunities is that they cannot develop the sense that they are special, and their ideas are worthy of discussion.

Lareau argues that low-income parents often view the role of the school and the educator differently than parents with higher incomes. Low-income parents often surrender their power and opinion to their children's teachers and entrust them to be the sole educator of their children. It is the child's teacher, not the parent, who manages their son or daughter's education. Parents often do not question the teacher or school's policies and practices. If they do have questions or complaints, their lack of financial or political power can minimize the strength of their concerns. Lareau states giving total control to the school and teacher may lead to minimum levels of participation by parents, which can negatively affect students' academic achievement. With little communication between parents and the school, issues such as learning or emotional disabilities can go unnoticed or untreated. The expectation of parent involvement and the nonparticipation of low-income parents may portray, to the teachers, an image of disinterest in their child's education. (Delagado-Gaitan, 1991; Smith, 2006).

High-income parents.

High-income parents are often able to provide their children with advantages and opportunities that foster their children's development, on the contrary, lower income families perhaps cannot afford or lack to do the same. "Soft skills" such as empathy, good manners, and sociability and civic behaviors learned from extracurricular activities, sports, clubs, and volunteering all place high income students at an advantage. Cultivated "soft skills" can benefit students when it comes to interviewing for a job, internship, or admittance into a college (Berg, 2010; Putnam, Frederick, & Snellman, 2012). Consequently, as the income gap grows, so do the differences in academic preparation and college attendance expectations between the two groups. Families with higher incomes often encourage career paths that involve substantial financial sacrifice in the forefront but pay extremely well once the degree is completed, such as medical or law school. In addition, high-income families now spend almost seven times the amount of money on college preparatory activities such as college visits, test preparation materials, tutors, etc, than low-income families. (Buchman, Condron, & Roscigno, 2010; Kornrich & Furstenbergm 2013). Such measures often result in a disproportionate amount of highincome students admitted to elite college and universities. This phenomenon leads people to believe in the myth of merit, meaning that high-income students have superior access to more educational resources and supports than their low-income peers do. The advantage is overlooked for less privileged students when admitting or denying students to colleges and universities or awarding scholarships.

Lareau explains merit as "middle class children can be said to have been "born on third base but believe they hit a triple" (2011). Students believe it was their skills, talent,

and intelligence that gained them entrance into an elite university not realizing that their low-income peers were not afforded the same opportunities. Friedman's survey shows that 90 percent of the students attending MIT come from dual income homes where parents made the importance of education their first priority (2007).

Role of parents in post-secondary planning process.

College educated middle and upper class parents usually are aware of the SAT college entrance exams' role as a "gate keeping" tool used by elite and semi-elite colleges and universities. Buchman, Condron, and Rosaigno (2010) found that the larger the family income, the more likely the student used the two most expensive SAT test preparation methods, private courses and private tutoring, compared to low-income students who had no SAT test preparation at all. This test preparation has the ability to affect greatly the inequalities between high and low income students when it comes to college enrollment.

Not only can many middle and high income parents provide their children with tangible college preparation materials and opportunities, they themselves, more often than not, attended college and can provide their children with the cultural and social capital necessary to be successful in other educational settings (Lareau, 2002; Roksa & Potter, 2011). A study conducted by Engberg & Wolniak (2010) found that a high school student's likelihood of attending a two or four-year college increased significantly when his or her family and friends expressed or experienced similar aspirations. They also concluded that as parents with similar aspirations for their high school students increased, so did the chances of their child attending a four-year college. The results were the same for high schools students whose friends also aspired to attend four-year colleges. Many

of these families encouraged their students to write application essays and participate in extracurricular and community service activities, all which increase a student's odds of acceptance into a selective college (Buchman, Condron, & Roscigno, 2010; Rosksa & Potter, 2011).

Students from lower socioeconomic families often have to work after school to help support their families limiting their time to engage in such activities outside of the school day. Research shows that students employed during high school have less of a chance of advancing to a postsecondary school compared to their peers who participate in extracurricular activities.

Children in high income families are increasingly likely to be raised by two parents both with college degrees; whereas, low income children are more likely to be raised by a single mother with a low level of education (McLanahan, 2004, Schwartz & Mare, 2005). Indeed, the U.S. Census Bureau reports 4.1 million single mother families are living in poverty (2013).

Benefits of a College Degree

A high school diploma provides graduates two options: they may attend college to prepare for a high wage profession, or they may seek out a low paying low skill job in the service or routine production sector. The current economy rarely allows the non-academic student the opportunity to make a middle class wage. Since the 1980s, there are fewer opportunities to obtain a middle class life style without a college degree.

Occupational projections from 2004-2014 indicated that a minimum of an associate's degree was required of 80 percent of the fastest growing occupations and 36 percent would require a bachelor's degree. College educated workers have a lower chance of

unemployment and more opportunity for on the job training and access to technology than those with only a high school diploma (ACT, 2010). Life-long learning, professional development, and current technological skills allow those employed in professional fields to continue to strengthen their competence and meet professional and personal goals. There may be fewer opportunities for professional growth in low skilled jobs. Consequently, the income gap between those who are college educated and those who are not grows wider. Minority and low-income students are disproportionately underrepresented on college campuses, and therefore, continue to inhabit the lower rungs on the socioeconomic ladder.

National Benefits

Educational disparities can affect all Americans, not just individuals within a minority or lower socioeconomic group. In order for the United States to increase its economic competitiveness, all students, not just middle class Caucasian and Asian students, need to be completing college degrees at a much faster rate.

In a recent survey conducted by ACT (2010), most Americans believed that all students regardless of their race or current economic status should have the opportunity to obtain the "American Dream." Studies show that attending an institution of higher education leads to improved overall health outcomes, to increased earning potential and job satisfaction, and to a greater quality of life (Baum & Ma, 2007). Reducing the educational and economic gaps between races and classes may be possible if more students can successfully earn college degrees.

At the same time, a greater number of college graduates may benefit the American economy as it struggles to maintain its position in the global economy. The quality of life in a society greatly increases as the levels of education amongst its people increases. Better-educated workers lead to decreased unemployment levels, increased tax revenues, increased civic, and volunteer participation, and decreases in government and social service dependence (Baum & Ma, 2007; Peterson & West, 2003). Consequently, addressing the problem of college access has the potential to simultaneously increase overall levels of education as well as increase one's social mobility (Baum & Ma, 2007; Bowen, Kitayama, & Nisbett, 2009).

What Colleges Want

Though most Americans strongly believe in the accessibility of the American Dream, those occupying the upper echelons of the economic ladder may not be willing to alter traditional college acceptance measures. High SAT and ACT test scores, participation in a plethora of extracurricular activities, and a high school transcript loaded with honors and Advanced Placement classes are standard tracks for college admission and what is common place for high income students. Higher Education institutions view the cultural capital of Caucasian middle and upper class families as the standard rather than a function of social privilege, as a result middle and upper class students may be granted greater academic advantages.

Teachers may expect students to display conventional school behavior and academic habits, even those lacking the cultural capital to have previously acquired these skills. In the school setting, teachers tend to reward the skills, habits, and styles of those students with greater cultural capital. Later, colleges and universities are attracted to these same skills (Oakes, 2003; Tierney & Hagedorn, 2002; Wood, 2008). Such privilege often

provides middle class students with personal support systems that grant them educational mobility, and therefore, leads to economic security.

Colleges and universities often reward these same behaviors under the label of merit. In the past, elite four-year colleges gave automatic admission to students whose parents attended that college. Presently, colleges have moved away from such practices and now grant admission based on an applicant's merit. Yet merit, too, is a form of cultural capital. Parents with higher incomes may demonstrate and encourage the behaviors and attitudes that lead students to succeed in school and earn them college admission (Scott & Leonhardt, 2005). Therefore, Colleges perceive middle and upper class student success as earned without any connection to their social class, when in fact, upper social class advantages are the reasons for student success and fostered abilities and talents.

Lower test scores.

In addition, Alon (2009) attributes a portion of the class gap in college enrollment to low-income students' inability to produce higher scores on college entrance exams, which are becoming a more important factor when applying to highly selective institutions. Alon's study, *The Evolution of Class Inequality in Higher Education:*Competition, Exclusion, and Adaptation, found that between 1982 and 1992 selective institutions placed more emphasis on SAT or ACT scores than on grade point average.

As a result, students from higher socioeconomic families were able to keep up with the required test scores for admittance by hiring private tutors or purchasing study books and guides. Those less fortunate students lacking access to the same study materials produced scores that lagged significantly behind their better off peers. Over the ten-year

period of the study, higher income students gained four percentage points in freshman enrollment at selective colleges. During this same time, criteria for college acceptance placed more importance on higher test scores. The gain of four percentage points negated the applications of their lower income and lower scoring peers who were unable to pay for private college entrance exam tutoring and test preparation classes. The emphasis on rising test scores, therefore, disproportionately benefits high school students from the more privileged class.

Lack of Social and Cultural Capital

Even though students may have aspirations, persistence, and the desire to excel academically, in order to succeed in college, they often need to address their lack of social and cultural capital (Larrance, 2007; Wood, 2008). Low-income first generation students may have daily lives quite different from their high-income peers. Therefore, they may interpret daily life and the importance of going to college differently (Bedsworth, Colby, & Doctor, 2006; Tiernery & Venegas 2009). If admitted into college, these students are often under prepared when faced with unfamiliar social and cultural norms. Such experiences diminish their confidence as students, and they have a difficult time transitioning into the academic and cultural community of their college or university (Armstrong & Newman, 2011; Bean & Eaton, 2002; Conley, 2007; Kuh, Kinzie, Buckley, Bridges, & Hayek, 2006; Seidman, 2005; Tinto, 2007).

Some researchers argue, however, that low-income students who do not acquire such cultural capital during their childhood within the family are able to gain it over the course of their lifetime through education, experience, and social exposure which can lead to cultural mobility (Bourdieu, 1967, 1986; Bourdieu & Passeron, 1979; Dumais,

2002; Farmer-Hinton, 2008; Laureau & Hovart, 1999; Silva, 2001). Parents who have not attended college often look to college access programs and school counselors to provide the support necessary for college enrollment (Farmer-Hinton, 2008; Wimberly & Noeth, 2004). Therefore, these programs try to institutionalize the social and cultural capital required for transitioning into a postsecondary institution. School based social capital may come in the form of supportive and positive relationships between students and their teachers, counselors, and other staff members who treat college attendance as the norm (Gonzalez, Stone, & Jovel, 2003; Noeth & Wimberly, 2002). Perna & Titus (2005) have found that schools that are diverse graduate more minority and underrepresented college bound students than schools that lack diversity. Seemingly, interaction with peers and supportive adults with a range of social and cultural capital is beneficial to students who are missing such valuable college going resources.

Farmer-Hinton (2008) concedes that college access programs transmit cultural and social capital through:

- 1. Providing a culture of college access normative behavior,
- 2. Infusing college talk and resources into interactions between students and staff,
- 3. Providing academic and enrichment activities to support diverse student learners,
- 4. Helping students select appropriate postsecondary institutions,
- 5. Using social service supports and students' social ties with staff members to curtail possible roadblocks to students' college access,

Balancing a structure of resources, courses, and student/staff
relationships to convey the idea that college is a viable option for
disadvantaged students.

Benefits of College Access Programs

College access programs strive to provide underserved students from the lower socioeconomic strata with tutoring, academic enrichment activities, and personal college counseling services that the students may not receive from their families. It is the hope that through these activities, supports, and experiences students can make positive personal changes and gain the necessary capital for academic success, college admission, and university matriculation. College completion could free low-income students from the chains of intergenerational poverty and negative social stigma and help build the necessary capital essential for changing their social position and forming cultural capital to be passed down to future generations (Farmer-Hinton, 2008; Par, Denson, & Bowman, 2013)

Self-Efficacy, Social Trust, and College Going Culture

"Relationships with individuals with institutional know-how or with people who can provide socio-emotional support become integral in aiding students in negotiating the college-going process"

~ Tierney, Corwin, & Colyar (2005)

Bandura and Self Efficacy

It has been suggested that the driving force behind social processes and changes in behavior and attitude is human agency. Bandura (2009) defines human agency as a

person's ability to exert influence over one's own functioning and actions to affect directly one's life plan. Individuals possess a natural desire to control their life circumstances and the desire to position themselves comfortably in society can be the motivating factor behind a student's desire to attend post-secondary school. Bandura's work with social cognitive theory or the idea that people learn by observing others, can be used to explain why some students "buy in" to the idea of attending college or postsecondary school and others do not (1986). One student may perceive the idea of going to college as a positive and necessary challenge while his or her peers may perceive attending college as a negative challenge or threat. The two types of students develop their own expectations about the possibility of attending college, some positive, and some negative. Higher income students tend to view attending college as positive since their parents most often also went to college, and the students themselves reap those benefits. Lower income students, who have little interaction with people who have gone to college may view college attendance as negative and fear they are not academically or financially prepared for such a challenge.

Self-Efficacy

Bandura defines self-efficacy as the belief that, after acquiring cognitive, behavioral, and self-regulatory tools, one is capable of organizing and executing the appropriate course of action required to accomplish specific tasks and manage everchanging life circumstances (1977). The strength of his or her self-efficacy has a direct effect on his or her ability to handle obstacles and aversive experiences, which is particularly important when beginning a new task or experience, such as attending college. An individual's self-beliefs are first built from multiple mastery experiences

where the belief that they are capable of an action is actually exercised (Bandura, 1982). If an individual cannot personally create mastery experiences for herself, her self-efficacy can also be strengthened by witnessing vicariously the mastery experiences of others. For instance, students observing their peers' acceptance into college may reinforce their own belief that they can do the same. Much of human behavior comes from modeling and adopting the behavior patterns through the observation of others (Bandura, 1971). Seeing people who are similar to themselves experience success after applying specific effort to an unfamiliar task will help observers to believe that they too are capable of similar success with similar effort (Bandura, 1986). The more positive and successful experiences one has, the more likely he or she is to maintain their changed behavior or attitude.

Bandura and others stress the importance of developing college-going aspirations and building a sense of self-efficacy amongst low-income and first generation college bound students. Such beliefs may lead to higher academic advancement and college going behaviors (Bandura, 1989; McDonough, 1997, Savitz-Romer, 2010). To move beyond mere affirmation, educators, or "efficacy builders" need to place students in structured situations where they are likely to succeed and avoid placing students in situations where they may prematurely fail. This is particularly important for students who are truly unsure about their aspirations to attend post-secondary school.

Social Trust Theory and Trust in Schools

Schneider (2007) centers her conceptual framework for creating a college going culture on the concepts of social trust and trust in schools. Social support services are as essential to the program as academic support services (Farmer-Hinton, 2008). The

literature suggests that school improvement and advancing student learning and achievement can be strongly associated with the amount of relational trust among the adults and the students within a school. Consequently, trust is essential when it comes to counseling students to embark on a postsecondary journey that often no one in their family has ever attempted.

Gambetta (1988) states that trust is indispensible in situations of ignorance or uncertainty with respect to the unknown or the unknowable actions of others. Trust, therefore, is linked to the uncertainty and uncontrollability of one's future. People rely on their sense of trust and use it as a survival strategy when faced with a human created event or experience over which they have little control. Trust, then, is understood as a "simplifying strategy that enables individuals to adapt to complex social environments (Sztompka, 1999). When individuals can trust to allow themselves to adapt to new social environments, they also allow themselves to experience new opportunities (Earle & Cvetkovich, 1995). High school counselors who can earn the trust of their students can encourage and convince their students that college is a worthwhile investment and that they are capable of being successful at the post-secondary level.

Trust is earned when the truster (the student) estimates the target (educational professional) to be worthy of receiving his or her trust. Sztompka (1999) calls this primary trust and defines it as the traits and qualities of a person or institution, which makes them worthy of trust. He identifies three bases of primary trust: reputation, performance, and appearance.

Reputation, performance, and appearance.

Reputation factors in a person's past professional accomplishments, their academic qualifications, their second-hand stories, examples, and testimonies, and their personal experience. Sztompka describes the second basis of primary trust, performance, as the actual tasks accomplished, professional conduct, and current obtained results. The trustee works with the truster as he or she is in the present, without incorporating his or her own past. Appearance, the third basis of primary trust, can be elicited or lessened by a plethora of external factors and characteristics. Age, race, gender, visage, body language, readiness to smile, intonation, and dress can have an effect on someone's ability to appear trustworthy. The effect that a professional's reputation, performance, and appearance have on a truster is pertinent to building a trusting relationship.

College Access Adviser Trust

In the context of college access programs, college access advisers must work diligently to earn their students' primary trust. To convince students to engage in activities that often no one in the student's family or social group have engaged in requires a strong trusting relationship between students and advisers. Students are more likely to trust college advisers who have a positive reputation within the school and are willing to help students. Students also trust advisers who are competent, consistent, and well known for helping all types of students gain acceptance into colleges. Finally, students may base their trust for a college adviser on an adviser's appearance. Advisers who present themselves as professionals, in terms of dress, language, and body language gain their students' trust by looking the part of a confident and competent adviser who is ready and willing to help students.

Schools that immerse their students in a culture of academic achievement and college attendance expectations strive to earn the undaunted trust of their students.

Without trust between students and staff, the school may lose an important dimension of civic culture necessary for academic achievement. In addition, without trust, social and cultural capital cannot be passed from adults to students, and although implicit, social and cultural capital remain an important component of college acceptance and enrollment (Gubbins & MacCurtain, 2008; Sztompka, 1999). Students who are immersed in a network of teachers, counselors, and other staff members who reflect the college going culture of the school through high expectations and the consistent dialogue of the importance of college attendance increase their chances of attending a four-year college or university (Farmer-Hinton, 2008). Therefore, trust becomes a fundamental element in creating a college going culture and an educational professional's ability to gain the trust of his or her students becomes a pertinent and priceless requirement.

Building a College Going Culture

Even when college going first generation and low-income students are equipped with high levels of self-efficacy and have fostered relationships with people who support their college going aspirations, they often lack basic college knowledge of what it takes academically, socially, and financially to apply, be accepted, and enroll (Avery & Kane, 2004). School systems have the opportunity to break the cycle of intergenerational poverty due to the lack of post secondary education by having high expectations for their students as well as offering them a rigorous and academic curriculum that prepares them for post-secondary level work (Adelman, 2006; Allen, Kimura-Walsh, & Griffin, 2009; Stanton-Salazar, 2010). Incorporating such elements into the structure of a school leads to

what Corwin & Tierney (2007) define as a college going culture, or a school culture that promotes student learning, college readiness, and college matriculation for all its students.

It is important to note that regardless of race and socioeconomic status, many students aspire to attend college. A 2005 survey on college plans showed that the number of sophomores expecting to earn a bachelor's degree rose from 32 percent in 1990 to 40 percent in 2002. Moreover, the number of high school sophomores expecting to earn a graduate or professional degree rose from 27 percent in 1990 to 40 percent in 2002 (Fox, Connolly & Snyder, 2005). However, even though the motivation and aspirations are often present, the lack of a rigorous course load, knowledge of the college application process, and minimal financial aid support can quickly negate these motivations and aspirations. Educational professionals should strive to expose students to all types of postsecondary schools depicting them as viable options (Foster, Leppma, & Hutchinson, 2014; Jun & Colyar, 2002). At the same time, educators should be upfront early on about the requirements and costs of different types of postsecondary institutions and encourage students to work towards meeting those demands.

College access programs seek to enhance the cultural capital and social support networks of low-income first generation students at the junior high and high school level. By fostering a college going culture, students who enter school without much college going knowledge will be served within the schools themselves (Johnson, 2008). It is the mission of college access programs to change the attitude of a school with a traditionally low college-going rate to one where going to college is not only the norm, but also the expectation of all students. By deconstructing stereotypical views of who gets to attend

college, schools empower their students to think about their future. Therefore, attending college is valued as a positive step for post graduation, and college-going behavior is positively and consistently reinforced (2008). Schools with college access programs believe that all students, given the right preparation and guidance, can succeed and gain acceptance into college. It is the school and program working together to construct the conditions where information about postsecondary options is easily shared and transmitted between students and staff members (Engstrom & Tinto, 2008; Farmer-Hinton, 2008; Grodsky & Jones, 2005; Schneider, 2007; Swail & Perna, 2002). Such school based supported efforts create an empowering environment for students embarking on the college going process.

Collaboration of School and College Access Programs

In the era of standardized testing, often programs or initiatives not directly linked to raising students' test scores are unfortunately often deemphasized. College access programs and the extended opportunities provided to disadvantaged students often become peripheral within a secondary school rather than a fundamental part of the school's college going culture. This hinderence greatly challenges a program's ability to be effective (Aldana, 2013; Gandara, 2001). Research shows that the quality and quantity of counseling and other college going resources available within a high school greatly affects its student's college enrollment decisions. It is extremely important that programs and schools work seamlessly to positively affect the number of students attending college or postsecondary school (McDonough, 1997; Perna & Titus, 2005; Rochford, O'Neill, Gelb, & Ross, 2011).

Programs attempt to emanate the social and cultural capital necessary for college success by providing students with personalized college planning and exposure to college preparatory enrichment activities. Within the high school, faculty and staff promote attending college by providing information, resources, personal support services, and advisement as students navigate the complex college search and application process (McKillip, Goodfrey; Rawls, 2013; Roderick, Coca, & Nagaoka, 2011). Students may also need assistance with developing study and time management skills, maintaining orderly conduct in the classroom, and fostering positive relationships with school personnel (ACT, 2008). Studies show that urban students who attend high schools where there is an established pattern of college attendance, where teachers instill high expectations and strong support for college attendance, and where there is knowledge and participation with the financial aid process, are more likely to matriculate into a four year college or university. (Coca, & Nagaoka, 2011; Corwin & Tierney, 2007; Engberg & Wolniak, 2010; Roderick, 2011; Weinstein & Savits, 2009).

College Access

Postsecondary education is quickly becoming paramount for economic independence and a comfortable middle class lifestyle. Increasingly, the higher education system has come to be viewed as not only a provider of individual, social, and economic opportunity, but also a necessary element in the national quest for equal opportunity across socioeconomic, racial, and ethnic lines (Anderson & Hearn, 1992; Torche, 2011). The income gap between those who earn a degree and those who do not grows larger each year. Even attending college and not completing a degree program

increases one's earnings by five to eleven percent compared to individuals with a high school diploma only (U.S. Census Bureau, 2006).

College Readiness

Haveman & Smeeding (2006) found that students residing in poor and minority neighborhoods, particularly in urban areas:

- 1. Are less well prepared academically,
- 2. Perform poorly on college entrance & readiness exams,
- Are ill prepared to select colleges, apply for admission, and secure acceptances,
- 4. Are poorly informed about the cost of attending college and the availability of need based financial aid.

In the 1960s and 1970s, providing underrepresented students with access to college was limited to federal and state financial aid programs. Such programs overlooked the importance and necessity of supporting the academic, social, and psychological preparations required to be college ready (Swail & Perna, 2002). Conley's research (2005; 2010) seeks to define what it means for a high school student to be "college ready." Through his work, he defines college and career readiness as the capability of a high school graduate to enroll and succeed in credit bearing courses without needing remediation when beginning at a college or university and then progressing to the next course in sequence. In addition to a student's academic preparation, Tierney, Corwin, and Colyar find that access to college planning information and college website navigational strategies, development of self-efficacy and college

gong aspirations, strategies of socialization and acculturation, and financial aid and financial planning skills also contribute to a student becoming college ready (2005).

Academic Support

In the United States, a student's level of college readiness can vary drastically, depending on his or her socioeconomic status and the location of his or her school. Using variables such as high school grade point average, SAT and ACT scores, and curricular rigor, only 58 percent of low-income students were academically college ready compared to 68 percent of middle-income students and 86 percent of high-income students (ACT, 2013). Educational institutions such as the ACT, argue that high schools need to ensure that all students, including racial and ethnic minorities and students from lower income families, have access to high school coursework that is of sufficient depth and intensity to prepare them adequately for college and careers. A survey conducted by the ACT found that 43 percent of 10th graders who stated their desire to earn a bachelor's degree were not taking college preparatory classes. Students need to be given better guidance to eliminate the discrepancies between their educational aspirations and high school coursework that disqualifies them from entering a college or university (ACT, 2010). In addition, students academically prepared for the rigors of college who have taken four years of rigorous coursework, including Advanced Placement classes are more likely to attend and remain in college, to be academically successful, and to graduate with a degree (ACT, 2010; Farmer-Hinton, 2008). The socioeconomic and racial college enrollment gaps are narrowed when students demonstrate academic success in the most rigorous classes a high school offers.

Entrance Exam Testing Support

Studies conducted by the ACT (2010) found a significant correlation between annual family income and college readiness based on ACT test data. Results showed that students with higher socioeconomic statuses scored consistently higher on the college readiness test than students from economically disadvantaged families. The College Board found similar socioeconomic related gaps in students' SAT scores. Similarly, SAT takers in the lowest socioeconomic level, defined as an annual household income of less than \$20,000, earned a composite critical reading and mathematics SAT score of 890. Their peers within the highest socioeconomic level, defined as an annual income of more than \$200,000 earned a composite critical reading and mathematics SAT score of 1140, 250 points higher than the lowest socioeconomic group of students (College Board, 2009). Consequently, higher SAT scores are often linked to higher family incomes.

College Selection and Admittance Support

Research shows that low-income first generation potential college bound students possess limited knowledge about their college options and have difficulty identifying the best postsecondary match to meet their academic needs and future goals. Their postsecondary attendance patterns are significantly different from those of a traditional college freshman. However, Lautz, Hawkins, and Perez (2013) argue that even spending just 10 percent more time on postsecondary planning showed a 4 percent increase in students attending a four-year college immediately following high school graduation. Exposure to college planning activities such as college tours, summer enrichment programs, college search guidance, and career counseling are also successful practices for helping students matriculate into four-year colleges (Farmer-Hinton, 2008).

Without college and career guidance and counseling, low-income and minority students often delay enrollment, attend school part time, enroll in a certificate or diploma program, or attend a two-year vocational school or community college (Goldrick-Rab, 2006). Delaying enrollment immediately following high school graduation negatively affects a student's chances of graduating from college. The longer a student is delayed in attending college or postsecondary school the less likely he or she is to earn a four-year degree (ACT 2010; Adelman, 2005).

Low-income students who do choose to attend college, disproportionately, begin their post secondary careers at two-year institutions with the hopes and intentions of transferring to a traditional four-year college or university. Rather than being a precursor to four-year colleges, community colleges are often just another dead end school experience for students just graduating high school. Recent studies have found that 75 percent of students attending community college planned to transfer to a four-year college, however, only 17 percent transferred within a five year period (Cabrea, et al, 2003; Leonhardt, 2005; Tiernery & Venegas, 2005). Furthermore, a mere 10 percent of students who enroll in a two-year community college complete a bachelor's degree within six years (Berkner, He, & Cataldi, 2002). In addition, the longer one takes to complete a degree, the more expensive the degree becomes, defeating the purpose of attempting to save money by beginning at a two-year institution. In actuality, research has found that the chances of completing a four year degree are much higher when a student begins his or her college education at a four-year institution versus a two-year community college (Goldrick-Rab, Pfeffer, & Fabian, 2009; Long & Kurlaender, 2009). Low-income and minority students are disproportionately trapped in such attendance

patterns even though they may have had the academic competitiveness needed for a four-year college or university in the first place (Goldrick-Rab, 2006). The two-year college trap is one of the ways higher education may perpetuate the income and educational disparities in our society.

Financial Aid Support

Going to college for first generation and minority students who are from low income backgrounds is an active choice that necessitates a myriad of inter-related decisions and actions, particularly with the financial aid process (St. John, 2003). Often times, the financial aid process is far more complex and difficult to navigate than the actual college application process. Research shows that this complexity is often an overwhelming barrier for families and discourages students who could otherwise succeed in college (Archibald & Feldman, 2011). Most public highs schools lack the personnel and resources to assist their students. In a 2005 NACAC study, 55 percent of public school counselors claimed that they had "too little time for educating students" about the financial aid process, leaving their college bound seniors to translate the myriad of acronyms and financial aid lingo on their own, including the confusing and cumbersome Free Application for Federal Student Aid (FAFSA) online application.

If a low-income and/or minority student works through the complicated financial aid process, which must be completed to qualify for grants, loans, and scholarships, the student is still often met with a large out of pocket cost. Long and Riley (2007) found that after colleges and universities distributed their financial aid packages to dependent students, 56 percent of African American and 58 percent of Hispanic students still had unmet tuition cost need compared to only 40 percent of Caucasian students. The inability

of African American and Hispanic families to supply their students with the finances to cover the unmet need puts students in these two groups at a greater risk of dropping out during or immediately following their first year of college (Chen & DesJardins, 2010; Goldrick-Rabb, 2006). In addition, these minority and low-income students most often do not qualify for private or institutional merit based scholarships because of their poorer high school preparation. Though the financial aid system was designed to assist students with funding their education, McPherson and Schapiro (2006) found that colleges, universities, and state education associations are providing students with more merit based rather than need based aid. Consequently, already disadvantaged families are responsible for paying the remaining college costs, which they most often simply cannot afford.

Social Support

Perhaps more than any other college access support listed above, first generation, low-income, and minority students need the social supports of knowledgeable, professional, and reliable adults who are able to foster students' academic self-efficacy, which may prepare them for both college entrance exams and a rigorous college curriculum. By forming trustworthy relationships with such adults, the students may develop an invaluable social resource for discussing and planning their postsecondary plan.

College Access Programs

"It is virtually certain that programs could meet with much greater success if research were able to better indentify which strategies are most effective for which types of students, under which conditions."

~ Gandara (2002)

History

The huge disparities between low-income and minority students and their middle income and Caucasian peers and the rate in which both groups attend college have sparked national concern for many years. Federal and state governments have been funding college access programs since the 1960s. More recently, educational institutions, such as College Board, private organizations such as The Gates Foundation, and local community and county departments, have also committed significant resources in an effort to assist disadvantaged students in their quest for a college education (Tierney, Corwin, & Coylar, 2005). Federal programs such as Upward Bound, Talent Search, and Student Support Services, also known as TRIO programs, have been in existence since President Johnson's administration's War on Poverty (1964). These programs focus mainly on first generation low-income students in junior high and high school.

The federal government has extended its role in promoting college attendance even further by including earlier grades in its most recent initiative, GEAR UP (Gaining Early Awareness & Readiness through Undergraduate Preparation). The program provides grants to states that collaborate with schools and other service providing entities that design and implement programs to improve a school's ability to raise student academic preparation and achievement consequently, promoting college enrollment

(Perna, 1999; Perna et al., 2008). State governments have also come up with programs to provide supportive services for low-income high achieving students. Among them, New Jersey, which funds STARS (Student Tuition Assistance Reward Scholarship) which provides low-income students with the opportunity to attend postsecondary school (Marina & Holmes, 2009).

Typology of College Access Programs

Funding streams from the federal and state government given to individual school districts, universities, and service entities for college access programs can greatly vary in the way in which they are implemented. In a key word search on Google, "college access programs" generates 327,000,000 hits and on the U.S. Department of Education's web site, the same search term generates 6,330 hits. Due to the variety of college access programs available to first generation, minority, or socioeconomically disadvantaged students, Perna et al., (2008) suggests using a typology or a "heuristic device" to help organize important parts of comparison (Richards, 1998, p 107). Using a typology can simplify and offer guidance for analyzing the way different programs and policies actually promote college enrollment for underrepresented students. Perna et al., (2008) and Gandara (2001) suggest using the categories listed below:

Barrier to college enrollment addressed.

Barriers to college enrollment addressed often center around students' lack of social and cultural capital that frequently result in academic and economic inequalities.

They can include familial, cultural, and social capital; inequality of resources in neighborhoods and communities; lack of peer support for academic achievement; racism; inequalities in K-12 schools including unequal distribution of well-qualified teachers;

segregation of Black and Hispanic students; poor high school counseling; low expectations and aspirations; high dropout rates; and limited financial resources (Gandara, 2001).

Program sponsor.

The state or federal government fund most college access programs. Funds are sometimes given to higher education institutions that sponsor programs that work with multiple K-12 schools, for example TRIO programs. Other times state and federal government funds are provided to non-profit organizations as grant monies who work with specific schools or specific students within K-12 schools. Governments may also allocate funds directly to K-12 schools for college access programs, such as the federal GEAR-UP program. The amount of funding often determines how many students a program can serve.

Implementation level.

Implementation level specifies how a program interacts with the students it serves. College access programs use one of four implementation styles when working with college bound students. The first approach is student centered, meaning the program focuses its attention and resources on specific students within in a larger student body. These students meet a certain criteria; most often based on income, race, or academic achievement and become program participants. The second approach is a school-centered approach. College access services are open to any student attending the school. These programs focus more on creating a college going culture and less on a particular group of students. Both types of programs attempt to approach students holistically, providing them with academic support, social support, advocacy, financial

information, college counseling, and other social services beyond the academic realm. The third type of program indirectly works with students through a higher education institution and provides opportunities for college bound students to visit their campus or attend enrichment programs during the summer or academic year. The fourth and most common type of program is a financial aid type of college access program. These programs also operate indirectly with the student and provide financial aid in the form of grants or scholarships to eligible students (Perna & Thomas, 2006).

Grade level and context in which the program is implemented.

The majority of college access programs focus on high school students, which is when students must make a decision about attending college. Some programs begin by offering academic support services to students' beginning freshman year. Other programs begin introducing the idea of college earlier and work with junior high and middles school students. Numerous programs, often referred to as "early commitment" programs, guarantee financial aid to economically disadvantaged students if they meet particular requirements. The HOPE (Helping Outstanding Students Educationally) scholarship in Georgia, which awards tuition money for any student with a 3.0 GPA or higher, is an example of this type of program. Meant to provide an incentive to excel academically in school, these programs also remove the distracting financial barrier for low income youth (Tiernery & Venegas, 2009).

Demographic and academic characteristics of the population served.

Many college access programs target one or more of the following groups of students: low-income, minority, or first generation youth (Tierney, Corwin, & Colyar, 2005). These groups of students are most often attending schools where larger

percentages of the school's enrollment are African-American, Hispanic, first-generation college bound, and/or eligible for free or reduced priced lunch. In addition, these schools often have a history of student populations with high dropout rates and low postsecondary enrollment rates. It is not uncommon for such schools to have more than one grant funded program operating simultaneously.

Components of the program.

Most programs focus on three components found to be predictive of successful college enrollment of minority, low-income, and first generation students; academic preparation, college knowledge and application assistance, and financial aid support (Tiernery & Venegas, 2009). These components vary in presentation. Academic preparation and support through after school tutoring, college knowledge through direct counseling, field trips to college campuses, college fairs and assistance with financial aid and scholarships are just a few of ways these components may be implemented. Programs may offer students all of these or a combination of these components depending on the funding source and the programs goals.

Requirements for participation.

College access programs use a range of criteria for targeting potential program participants. Most programs are targeted towards first generation low-income students regardless of academic record. Other college access programs target students who have demonstrated academic achievement. Still others seek out students with low incomes yet high academic achievement. Some programs only enroll students of a certain gender or race. Finally, there are programs open to all students within a school.

Financial support of the program.

Most college access programs receive funding from the state or federal government in the form of grant money and most often allocated amounts are based on the numbers of students a program serves.

Benefits of Increased Student Participation

Engberg & Wolniak (2010) have found that as the number of students participating in a college access program grows, so does the number of students attending a four-year college. Yet, despite the plethora of programs students' postsecondary plans are still largely shaped and predicted by nonacademic factors such as race and socioeconomic status and low-income, minority, and first generation college students continue to be a small percentage of postsecondary institution enrollment (Baum, Ma, & Payea, 2013). Significant attempts have been made to gain an understanding of the processes and elements that create a college access program, and yet there is little empirical evidence documenting what makes a program successful (Hearn, 2001).

Lack of Empirical Evidence for College Access Programs

Most research on college access programs for low-income and minority students conclude that academic preparation and achievement, knowledge and information about college and college requirements, and financial aid and resources are the four components most likely to lead to college enrollment (Perna & Thomas 2006). Studies focusing on these components are often quantitative in nature and present a program's success or failure by calculating college related numbers such as GPA, college and FAFSA applications completed, and college acceptances. The processes that lead to these numbers are not captured by current evaluation methods. In addition, the range and

variety of activities conducted within a college access program contribute to the difficulty of identifying which activities and practices produce the best results. Researchers argue that the lack of consensus and empirical evidence on program effectiveness consequently inhibits programs from providing the best services for disadvantaged students (Roderick, Nagaoka, & Coca, 2009; Tierney, Corwin, & Colyar, 2005).

Chapter 2 Summary

This literature review has aimed to provide a historical and current context for exploring the components and practices of successful college access programs. The notion that all students regardless of race, socioeconomic status, or familial level of education, should be provided with access and assistance to obtaining postsecondary education is foundational to this discussion. Furthermore, acknowledging the roles that cultural and social capital and social trust play in creating college ready students within schools with a college going culture is of prime importance. Lastly, research that pushes beyond sorting and describing college access programs within a typology is the foundation for studying the elements, practices, and professionals that create successful college access centers.

CHAPTER 3

METHODOLOGY

This chapter outlines the research methods for studying the effects of college access advisers and the opportunities they create for low-income first generation college bound students Methods for collecting data on best practices for influencing matriculation into college and creating a college going culture are also defined. The first two sections of the chapter provide brief descriptions of mixed methods, case study, and evaluation research and conclude with justification for using the case study, evaluation and mixed methods approaches. The following section is devoted to introducing the participants, setting, and principal investigator's role. The remainder of the chapter is dedicated to describing the research methods, which will include the data collected, the procedures for collecting the data, and the methods for analyzing the data.

Mixed Methods Research

Mixed Methods research is an intuitive way of doing research, a mixing of numbers and words that we experience in our everyday life such as in documentaries or news stories. Stripped of all the esoteric jargon, mixed methods research allows for seeing and hearing subjects or participants in multiple ways (Greene, 2007). Creswell and Clark (2010) expand the method further and offer a comprehensive definition that brings together both the methods and philosophy behind the mixed methods approach:

As a methodology, it involves philosophical assumptions that guide the direction of the collection and analysis and the mixture of qualitative and quantitative approaches in many phases of the research process. As a method, it focuses on collecting, analyzing, and mixing both quantitative

and qualitative data in a single study or series of studies. Its central premise is that the use of quantitative and qualitative approaches, in combination, provides a better understanding of research problems than either approach alone (p. 5).

Researchers have the option of using the mixed methods approach when using a single approach would ignore the collection of significant data. The quantitative approach alone leaves out important data such as understanding the depth of one's perception. The qualitative approach alone cannot gather enough data to generalize beyond the single or small group of participants studied. The strength of each method offsets the other's weaknesses and provides a more complete answer to the research questions better than either method could do alone (Jick, 1979).

Mixed Methods research frees the researcher of the restrictions of a single paradigm and allows for the interaction of all methods to solve a problem, which is what Creswell (2006) describes as "natural and practical." He explains that mixed methods is practical and natural "because individuals tend to solve problems using both numbers and words, combine inductive and deductive thinking, and employ skills in observing people as well as recording their behavior"(p.13). This method is implemented daily when individuals gather data for documentaries, sports broadcasts, and most non-fiction writing that uses words and numbers to explain phenomena.

This intuitive way of doing research has been described as a "new star in the social science sky" (Mayring, 2007, p. 1). It provides an avenue for the adversarial and staunchly individual qualitative and quantitative researchers to collaborate and help answer questions more holistically. Since mixed methods research melds together

qualitative and quantitative paradigms, it becomes the preferred method for understanding the world (Crewell, 2010).

Evaluation Research

Evaluation research can be defined as a systematic process for collecting and analyzing data for the effectiveness, value, quality, or merit of programs, practices, or products (Gay, Mills, Airasian, 2009). Fundamental to this type of qualitative research is its focus on change in the immediate present. The researcher's emphasis on the perspectives that people hold and their concern with process enables them to sort out the complications of change. The qualitative orientation allows the researcher to handle simultaneously, participants in change. This perspective directs the researcher to see behavior in context and does not focus on outcomes to the exclusion of process (Bogdan & Biklen, 2006). Quantitative studies are good at establishing the effects of a particular program, but qualitative studies help us to understand how a program succeeds or fails.

In education, evaluation research originates from two theoretical perspectives.

Positivist, rationalistic, and mostly quantitative in nature describe the first perspective and the second, a mirror to the first, post positivist, naturalistic, and mostly qualitative in nature.

Rationalistic Paradigm

The rationalistic paradigm sees education as an object to be controlled.

Individuals who follow this paradigm see education as a means to an end, do what is necessary to get a job and become a productive member of society. VanTassel-Baska and Feng (2004) describe the rationalistic paradigm below:

The rationalistic paradigm assumes that education is a controlled

enterprise. Such a mindset tends to view education as a means to an end, as producing an educated workforce or making the country more competitive. Teaching and learning are also seen as a means to desired ends, as elements in a system that can, in principle, be controlled. In this worldview, teaching is regarded as a skill craft based on technical expertise, problems with student learning can be dealt with by applying appropriate techniques, and education can be improved by a more complete mapping and of cause-and-effect relationships in the teaching and learning process (p. 2).

Naturalistic Paradigm

The naturalistic paradigm believes education is always changing and adapting to its context. Individuals who view the world from this perspective acknowledge its interrelatedness and holistic realities. VanTassel-Baska and Feng (2004) explain:

The naturalist paradigm assumes that education is in a state of flux and is, therefore, free from attempts to control its processes. Individuals who see the world of education as naturalistic acknowledge its interrelatedness and holistic realities. Teaching and learning are seen as reciprocal processes of uncovering meaning. Teaching is regarded as an art form, based on intuitive judgment about content and student and how they may best interact. Acknowledge that student growth is uneven and often unpredictable (p. 2).

Evaluation research in education combines the assumptions of both the rationalistic and the naturalistic paradigms acknowledging both worldviews.

Evaluation research is not conducted under one single philosophy. Debates concerning its philosophical assumptions have resulted in a wide array of methods for conducting evaluation research. However, in educational research one does not have to choose one guiding philosophy over another. Although naturalistic and rationalistic paradigms drastically contrast one another, they can be used together in evaluation research (VanTassel-Baska & Feng, 2004). Approaches to describing objects of study can be drawn from both paradigms within the same study to strengthen its data collection, procedures, and analysis.

Despite not having one concrete paradigm, evaluation research is compatible with the mixed methods approach to research. The freedom to use multiple methods for the collection of data allow for both the naturalistic (Qualitative) and rationalistic (Quantitative). The two paradigms are compared in Table 1 below.

Table 1.

Comparing the Two Paradigms of Educational Evaluation Research

Quantitative	Qualitative
Accumulate facts about human behavior to verify or elaborate on a theory to allow scientists to predict human behavior.	Human behavior is too complex to predict and meaning and process are crucial in understanding human behavior. Focus on collecting descriptive data.
Positivist	Post-Positivist
Goal of science is to uncover the truth. One can only study and understand what can be measured and observed. A way to understand the world enough to predict and control it.	Goal of science is to stay centered to the goal of getting it right about reality, even though that goal is unachievable. Few differences in the way scientists and the rest of the world think, therefore, scientific reasoning and common sense reasoning are virtually the same.
Empiricism – Observation and measurement are essential in any legitimate scientific study.	Critical Realism - belief that researchers should be critical of humans ability to know anything with certainty.

Case Study Research

Objectivist – one who believes that reality exists beyond what one can

measure and observe.

Subjectivist – one who believes that

there is no external reality.

This case study examined five college access advisers' experiences while interacting with their students in a high school setting. Stake (2005) states that case study research is used to examine a specific system that is bound by time and location. The five college access program advisers and their interactions with students within one high

school over the course of one semester, therefore, is the case. Merriam (1998) argues that case study design is especially relevant for studies that explore participants' experiences in their natural setting. In this type of research, the researcher has minimal control over the events he or she will observe.

Justification of Mixed Methods

Since this study sought to establish not only the effects of college access programs, but also understand what processes created these effects, a mixed methods research approach was most appropriate. Nora (2002) argues that when a study only focuses on outcomes, it fails to uncover the more difficult yet imperative processes such as student attitude and staff behaviors. The interactions between the two are essentially, what leads to the specific outcomes. Such processes cannot be highlighted or examined in large numeric databases that pay attention to outputs only forgetting the human processes that took place to reach those outcomes.

Quantitative data in a mixed methods study can highlight trends, such as whether or not the number of students accepted to college has increased or decreased. Through surveys, it can compile descriptive data such as age, sex, socioeconomic status, etc. about the educational professionals in a building. This method is best for recognizing the positive or negative effects of a program.

In addition, the mixed methods approach was first defined by evaluative researchers Greene, Caracelli, and Graham (1989). To strengthen their evaluations, at least one quantitative method, designed to collect numbers, and capture cause and effect phenomena was used. Green and others then used qualitative methods, designed to collect words, to gain insight into the phenomena. Furthermore, Van-Tassel Baska and Feng

(2004) state evaluation researchers "should use appropriate multiple methods based on alternative epistemologies' within the same evaluation" (p. 4). Evaluation studies that approach research from both the naturalistic and rationalistic paradigms need the flexibility of mixed methods to collect accurately data that is representative of both perspectives.

Participants

For this case study, a judgmental sample of high school teachers, and college access advisers were asked to participate fulfilling separate data collection procedures. All of the high school teachers had worked either full time or part time within the large suburban high school in Western Pennsylvania during the fall of 2014. The school was chosen not only because of its socioeconomic diversity, more than 65 percent of the students receive free or reduced priced lunch, but also, because 87 percent of its students attend some form of post secondary education after graduation. Many of these students are first in their family to attend any type of higher education institution. The superintendent and principal of the participating school received a letter and personal visit explaining the nature of the study and the superintendent signed the site approval letter (Appendix A).

Through personal visits, telephone calls, or emails, all of the college access advisers employed by each of the five programs were invited to participate in this study. Participation in the study was strictly voluntary. The study hoped to have a participating adviser representing each of the five programs operating within the high school.

Participants needed to agree to be observed a total of six hours. The six hours were broken up into 40 minute sessions. Once interviews and observations were

scheduled, each counselor received an email with the College Access Tool of Evaluation attached.

Setting

The study took place in a suburban Western Pennsylvania high school that borders a large city. Total enrollment for the school was 1,184 and 276 of those students made up the senior class during the 2014-2015 academic school year. The student population was comprised of 31 percent Caucasian students and 68 percent African American students. Such a large percentage of the student body qualified for free or reduced priced lunch, the district received a grant that allowed all students to receive a free lunch this academic year.

This high school was chosen to be the study site because of its unique history and diverse student body. The high school and district is the result of the last race based forced court ordered desegregation case in the United States. The case was won in 1981, but the five districts did not come together as one high school until the 1987-1988 school year. The district brought together African American and Caucasian students representing many different socioeconomic levels. Therefore, a college going culture was present in some of the former high schools, but not all. Historically, the high school's mission was to provide a quality and equitable education to all of its students regardless of race or socioeconomic status. The district was granted total unitary status in 2003, after proving to the courts they were providing all of its students with an attainable quality education. Recently, however, the district was faced with the reality that not all of its students are not receiving the same equitable education. The *Pittsburgh Post-Gazette* reported that there are a low number of African American students in higher level

and A.P. classes, along with a higher number of African American students referred for discipline issues (Polke, 2014). All these components make this school district an extraordinary case study.

Principal Investigator's Role

Qualitative research requires that the researcher make known any bias.

Consequently, I am a college and career counselor at the high school where the study took place. I conducted the surveys, observations, and interviews during scheduled personal time off for the 2014-2015 academic year. Data collection began fall of 2014.

Observations took place using the College Access Tool of Evaluation (CATE). The tool is modeled after the frameworks of Danielson (2007; 2013), Marshall (2009), VanTasel-Baska and Feng (2004), Stufflebeam (1971; 2007), and the National College Access Network's college matriculation indicators (2012).

The CATE was piloted during the spring of 2013 at five college access centers across Pennsylvania, all funded through the same non-profit organization. When the 2013-2014 school year began, only one of these college access centers, for which the evaluation tool was revised, was still functioning. The CATE was then recreated to observe and evaluate the diverse number of college access programs functioning within the one high school where I am a counselor.

The non-profit's prior evaluation procedure included a yearly performance evaluation of the professional and a monthly monitoring report that documented the college access centers' productivity. By themselves, these two formats did not provide the college access adviser with productive feedback to improve his or her practice.

Therefore, I was an advocate of creating a new evaluation tool that had the capacity to

look at the professional within the context of the college access program, most importantly, however, his or her interactions with students utilizing the program. Thus, I am a stakeholder in the success of the study and the usefulness of the CATE.

In this study, I assumed the role of the faithful reporter, faced with the task of presenting the participants point of view and allowing them to speak for themselves. In this role, the researcher studies phenomena from a naturalistic perspective. Blaikie (2000) explains this role.

The researcher is required to study social phenomena in their natural state, to be sensitive to the nature of the social setting, to describe what happens there and how the participants see their own action and the action of others (52).

In this setting, the researcher must faithfully report only what is observed in the phenomena under investigation. The observations should emulate the participant actions to the point that these participant can recognize him or herself in the final report. Schutz (1963) refers to this as retaining the 'integrity of the phenomenon." Social science research is the type of research that calls for consistency between the concepts derived from the research and the lay concepts already in place. He designated this idea as postulate of adequacy. He explains:

Each term in a scientific model of human action must be constructed in such a way that a human act performed within the life-world by an individual actor in the way indicated by the typical construct would be understandable for the actor himself as well as for his fellow-men in terms of commonsense interpretation of everyday life. (343).

This type of role participation follows an abductive research strategy that is reflexive in nature. Mason (1996) has considered the idea of reflexivity as one of the crucial components of a qualitative study, which means that while gathering data, researchers need to be reflexive and active rather than just collect data objectively. Since the idea of reflexivity is an everyday social practice involving the monitoring of both self and others, it is important for me as the researcher to always be self-checking my own actions and their role in the research process. My actions should be collected and examined in much the same way as the other data collected.

Some argue that the researcher should remain an uninvolved spectator or otherwise discredit the validity and reliability of the knowledge produced; as a result, many criticisms have been raised against reflexivity. However, in this study I personally knew all of the participants being observed, total detachment was not be possible. From the perspective of some, this decision may negatively affect the objectivity of the study's results. Consequently, trustworthiness is addressed later in the chapter.

Data Collection

Data collection is the first part of the research design and the purpose of this section. In mixed methods research, data are collected using both the quantitative and qualitative methods (Tashakkori & Teddlie, 1998). This study's methodological approach is more qualitative than quantitative, represented by the letters QUAL + quan. Data was gathered using quantitative surveys and qualitative interviews and observations.

Collection began with the quantitative component of the study. Questionnaires were administered to educational professionals and college access advisers, a separate survey for each role. The educator questions probed the effect of the programs on the "college

going culture" of the school, and the program's integration or auxiliary status within the school. The adviser survey asked very specific questions about each of the programs, and these answers were organized in the typology. Copies of the two surveys are located in Appendix B and C.

The next data collection tool used was the College Access Tool of Evaluation (CATE) located in Appendix D. With the evaluation tool, I observed the components of programs and the behaviors of staff. The tool collected data about the processes that lead to students matriculating into college. Prior to the CATE, only output data was deemed important. Data was collected over the course 24 forty minute sessions.

Individual interviews were conducted with college access advisers from each of the five programs. The interview did not exceed 30 minutes in length and took place at the end of 2014. A sample informed consent form is located in Appendix E.

The data collection for this study was modeled after a combination of Danielson (2007; 2013), Stufflebeam (1971; 2007), and The College of William and Mary (Van-Tassel Baska,& Feng, 2004) evaluation Models. The Stufflebeam model, out of Central Michigan University, examines four aspects of a program: context and design, inputs, processes, and outcomes. Quantitative and qualitative data sources are analyzed to understand each aspect of the program. The William and Mary approach was used for observations and interviews to explore the qualitative dimensions of the program. In addition, the approach triangulated data and identified themes, issues, and patterns not captured using quantitative methods. Multiple data collection methods of the study increased its trustworthiness.

Data Collection Procedures

The data for this study was collected from three sources: observations using the CATE, interviews with college access advises and surveys of educators. The school district and the programs also supplied additional data documenting specifics of the grant programs needed to complete the typology. The data for this study was drawn from a judgmental sample. Gay et al. (2009) defines a judgmental sample as a sample selected by the researcher based on his or her prior knowledge or experience. The sample is chosen because it is believed to represent a certain population. This type of sampling is relevant to the researcher since participants were to partake in other data collection procedures.

A packet of information about the study and its purpose was sent to both the district superintendent and the principal of the participating high school. The packet included a cover letter asking permission to administer the survey to the school's faculty as well as a copy of the survey instrument. The principal agreed to his faculty's participation in the study, and the researcher asked a colleague to distribute the survey instrument to the teachers during an after school staff meeting. The teachers independently completed the survey and returned it to the main office in the provided envelope to be picked up by the researcher. Participation in completing the survey was voluntary. The survey was a combination of 17 multiple choice or Lickert items. The identity of those completing the survey was kept anonymous. If the participants or district administrators wanted to know the results of the survey, they could have requested it from the researcher. However, all data collected by the survey was anonymously reported in group totals only. No individual identities were disclosed.

A separate packet of information containing a different survey was sent out to each adviser of the five college access programs. A cover letter explaining the purpose of the survey as well as a copy of the survey instrument was included in the packet. If a counselor agreed to participate, they were asked to complete the survey and return it in the envelope provided to the high school office. The survey was similar in structure to the educator survey and contained 16 multiple choice or ranking questions.

Interaction with the college access programs' advisers was essential since they are the heart of the college access programs. At the end of the survey, the advisers were asked to email the researcher if they would be willing to participate in a separate interview as well as several observations. All information collected was kept confidential and no identifying information of program or adviser was included.

The adviser interview results were supported by other data collection methods. A survey for the school's educators and a survey for the college access program advisers were administered to collect descriptive data. Observations of the college access programs and advisers used the CATE to record qualitative data.

College Access Tool of Evaluation

One of the main purposes of this case study was to develop an instrument to evaluate college access programs, since an accredited evaluation tool does not exist. The CATE was developed by the researcher after examining the literature on first generation low-income students and their college going patterns as well as the National College Access Network (NCAN) indicators on college matriculation. The evaluation tool combined the framework of Charlotte Danielson's teacher evaluation framework, Van-Tassel-Baska's and Feng's gifted program evaluation, Stufflebeam's CIPP evaluation

model, and the NCAN indicators to develop the format and criteria for the evaluation.

The four domains that the literature purports to use to collect data on college access programs are academic support, standardized testing support, college admissions support, and financial aid support. The CATE has six domains:

- 1. College going activities, and admissions,
- 2. Trust, self-efficacy, and relationships,
- 3. Professional activities and responsibilities,
- 4. Academics and testing,
- 5. Building a college going culture,
- 6. Financial aid.

The CATE was piloted in the spring of 2013 and used to observe college access programs operating within five urban and suburban high schools across the state of Pennsylvania. The tool observed not only activities and services the program provided but also the way college access advisers interacted with the students to implement the services.

The participants for the pilot test were chosen as a convenience sample of college access programs in Pennsylvania that were all being funded by Pennsylvania College Access Challenge Grant. The schools varied in size, demographics, and regional location so that the versatility and adaptability of the evaluation instrument could be assessed. To test the tool's reliability and validity, three individuals were trained and used the tool to evaluate the five programs. After each observation, the individuals compared their notes

to check for consistency and discrepancies in the observations. An original copy of the CATE can be viewed in Appendix F.

Interviews

Bogdan and Biklen (2006) define interviews as "purposeful conversation, usually between two people, that is directed by one in order to get information from the other" (p. 95). Qualitative researchers use interviewing as a way to collect descriptive data in the participant's own words to gain understanding and insight on the participant's perspective of some piece of their world. Furthermore, interviews can be used in the following ways: as either the dominant strategy for data collection or as one of multiple strategies used with participant observation, document analysis or other qualitative techniques. In this case study, the interviews were used alongside of surveys, participant-observations, and document analysis to better understand participants' perspectives of their role and participation in their college access program, especially as it related to achieving college matriculation for first-generation and socioeconomically disadvantaged students.

Bogdan and Biklen categorize interviewing techniques as either "structured" where the interview is controlled by prepared and specific questions or "un-structured" where the participant is encouraged to talk in the area of the researcher's interest. For this study, where the researcher sought to collect answers to specific questions as well as to gain insight into participants' experiences and knowledge about college access, a "semi-structured" interview approach, combining both structured and open-ended questions, was used (Gay, Mills, & Aisasian, 2009). As such, an interview protocol for college access advisers was created which helped to gain understanding and insight about the

advisers' experiences working with low-income first generation college bound students. Through this interview process, I also sought and collected information to complete the study's typology table.

Data Analysis

Data analysis of this mixed methods study began at the start of data collection.

This continuous process allowed theories to evolve and be constructed by establishing categories and coding the data, which is a central component in qualitative data analysis.

This mixed method approach also lead to categories and codes that were analyzed immediately upon completion of the interviews. Created categories were explored further at follow up observations of the programs using the CATE.

Grounded Theory Analysis

Sociologists Strauss and Corbin developed the design of grounded theory in 1967. It originated from the idea that the theories used in social science research explain that the core idea behind grounded theory analysis is the fact that a theory is not predisposed but will be generated or "grounded" in data from participants' observed actions, interactions, and social processes (1998). A key idea is that this theory development is not inaugurated or substantiated within one's discipline, but rather is generated or "grounded" in data from participants who have experienced the process. In grounded theory research, the participants to be interviewed and observed are theoretically chosen to aid the researcher in the development of a theory (Straus & Corbin, 1998).

There are two types of grounded theory analysis, Strauss and Corbin's (1998) systematic and analytical type and Charmaz's (2006) constructivist theory. This study

sought to establish a theory systematically that explained the process and action of the phenomena and, therefore, used the Strauss & Corbin method of analysis.

Open Coding

To analyze and interpret the data collected through the interviews and observations, the researcher began the qualitative method of open coding which identifies and sorts the data into categories of information. Straus & Corbin (1998) explain categories as units of information composed of events, happenings, and instances. The open coding process used Berkowitz's (1997) six coding questions:

- 1. What common themes emerge in responses about specific topics? How do these patterns (or lack thereof) help to illuminate the broader central questions?
- 2. Are there deviations from these patterns? If so, are there any factors that might explain these deviations?
- 3. How are participants' environments or past experiences related to their behavior and attitudes?
- 4. What interesting stories or narratives emerge from the responses? How do the narratives help illuminate the central questions?
- 5. Do any of these patterns suggest that additional data may be needed?
- 6. Do any of the central questions need to be revised? Are the patterns emerging similar to the findings of other studies on the same topic? If not, what might explain these discrepancies?

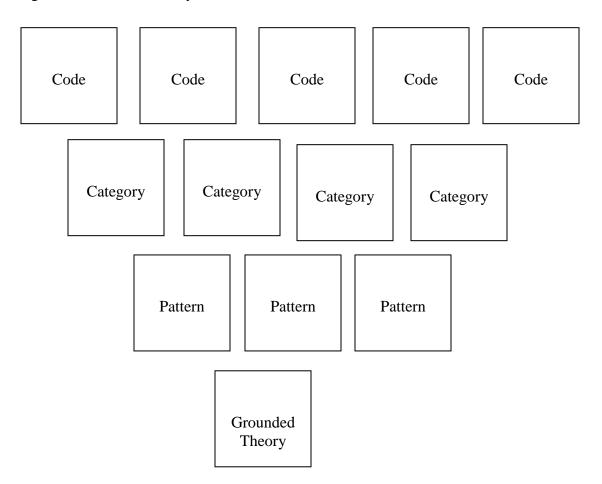
Data analysis of the interviews began immediately after the first interview since early interviews have the potential to influence questions when conducting the observations (Bogdan & Biklin, 2006). After core phenomena were detected, I created categories around this core phenomenon using Crewell's (2010) and Bogdan and Biklin's (2006) coding suggestions below:

- Activity codes identify recurring informal and formal types of behavior.
- Causal condition codes are directed at the factors caused the core phenomenon.
- Consequence codes identify the outcomes from using phenomena.
- Contextual and intervening conditions categorize the broad and specific situational factors that influence the phenomenon.
- Defining the situation codes categorize the world view of the respondents and how they see themselves in relation to the setting and topic.
- Event codes, in contrast are directed at infrequent or unique happenings in the setting or lives of the respondents.
- Method codes identify your research approaches, procedures, dilemmas, and breakthroughs.
- Process codes categorize sequence of events and changes over time.

- Relationship and social structure codes illustrate alliances,
 friendships, and adversaries as well as more formally defined
 relations such as social roles.
- Respondents' perspective codes capture how participants define a particular aspect of the setting.
- Respondents' ways of thinking about people and objects codes capture how they categorize and view each other, outsiders, and objects.
- Setting/Context codes provide background information on setting.
- Strategies codes relate to ways people accomplish things or how participants react to the phenomena.

Once open coding was complete, I began constructing a visual model of my codes, similar to the one below in Figure 2. Similar codes were placed together to form a core phenomena. This is the beginning of the grounded theory process. With the core phenomena identified, I went back to the data and begin selective coding which is a process that interrelates the categories into a pattern or narrative depending on the nature of the categories. Once the patterns had been identified, a narrative statement of a series of propositions could be made (Corbin & Strauss 1990; Creswell, 2006).

Figure 1. Grounded Theory Process



Typological Analysis

I used a typology to analyze the adviser interview data. As defined in Chapter 2, a typology is a heuristic device used to help organize important parts of comparison. The typology represents suggested categories for comparing college access programs (Perna, Rowan-Kenyon, Bell, Thomas, & Li, 2008). With the volume of similar data generated by the questions on the typology, typological analysis was most appropriate. In addition, the categories for the typology were easily identified and meant to create the beginning categories of this study. The typology can be found in Appendix G.

Survey Analysis

There were only five participants who completed the college access adviser survey; therefore, these results were tabulated by hand in an Excel spreadsheet. The teacher survey, however, generated 91 completed surveys. The data from these surveys was entered into the statistical program, SPSS and then was reported through descriptive statistics.

Trustworthiness

In the field of education, particularly public education, teachers, and administrators look to evaluative research to improve their practices. Educational researchers have the opportunity to make changes in current programs and practices that must demonstrate that the study was "conducted in a rigorous, systematic, and ethical manner such that the results can be trusted" (Merriam, 2002, p.24). While many studies pertaining to college access have been quantitative in nature, Wheeldon and Ahlberg argue that educational researchers need to implement multiple methods under the assumption that each method will reveal different aspects of the reality being studied (2012). They continue by stating, "The flaws of one method are often the strengths of another, and by combining methods, observers can achieve the best of each, while overcoming their unique deficiencies" (p. 308). Consequently, a study's reliability and validity stem from the mixing of qualitative and quantitative methods.

Reliability and Validity

The emerging mixed methods approach is based on the idea that understanding reality and developing knowledge occur more pragmatically which liberates the researcher from having to choose between the qualitative and quantitative method.

Results of mixed methods studies can be proven both reliable and valid because of the multiple stages of data collection and analysis used to better understand a phenomenon. The combination of methods provides the reliability of empirical numbers with the validity of human narratives (Wheeldon & Ahlber, 2012). Such ideas originated from Brewer and Hunter (1989) who state:

The multi-method (mixed methods) strategy is simple, but powerful. For if our various methods have weaknesses that are truly different, then their convergent findings may be accepted with far greater confidence than any single methods' findings would warrant. Each new set of data increases our confidence that the research results reflect reality rather than methodological error. (p. 17)

In mixed methods research, the term reliability is associated with consistency of measurement or the ability of a research instrument to produce the same scores each time it is administered (Gay, et al.). For the purposes of this study, the reliability of the CATE was the most important component. Presently, there is not a widely used reliable college access program evaluation tool. Consequently, it is extremely difficult to uncover the components and practices that lead to college matriculation. The CATE was greatly based on Stufflebeam's (1971) model of context, input, process, and product (CIPP) which proved to be the best approach for project evaluation due to its utility, feasibility, propriety, and accuracy (Zhang, et al, 2011). Creating an evaluation tool based on the CIPP framework could be useful in creating a reliable and valid evaluation model.

To ensure that the instruments created for this study would produce quality results, content and descriptive validity were measured. Content validity is measured

using inferences and expert judgment and cannot be recorded or described numerically. The content of the teacher and adviser surveys was reviewed by a college access director to ensure that the surveys were valid. In addition, three college access directors assessed the content validity of the CATE during the pilot study.

The CATE aided in the accuracy of the study's descriptive validity. The issue of validity was also addressed using several strategies from Guba's "Criteria for Assessing the Trustworthiness of Naturalistic Inquires" (1981). This study allowed for 24 hours of college access program observation using the CATE. The five college access advisers provided peer scrutiny of the research project. A different perspective allows project assumptions to be challenged when the researcher's closeness to the project inhibits his or her ability to see the project from a different viewpoint (Shenton, 2003).

Triangulation

In an additional effort to support the validity of the results, the researcher applied the triangulation method to the data. Jick (1983) states that triangulation is an effective method because it rests on the assumption that the different methods used will not share the same bias. Using multiple methods, data collection strategies, and data sources allows for the crosschecking of information. In social science or educational research, Denzin (1970) argues that researchers "must learn to employ multiple methods in the analysis of the same empirical event on the assumption that each method will reveal different aspects of empirical reality" (p.13). Triangulation is a qualitative method for proving credibility.

Evidence of the study's ethical considerations and participant protection was demonstrated through permission from the Institutional Review Board of Indiana University of Pennsylvania and the high school where the study took place. In addition,

the researcher provided all participants with a clear explanation that all data collection procedures were voluntary, confidential, and in the case of the surveys, anonymous. All participants also learned that they were free to withdraw from the study at any time and with no consequences.

Chapter 3 Summary

In summary, this study employed the mixed methods approach and triangulated data collection and data analysis in an effort to better understand the components and practices of college access programs that lead to college matriculation. This chapter described the data collected, the data collection procedures, and the data analysis methods. The results of the three data collection methods, observations, interviews and surveys will be discussed in Chapter 4.

CHAPTER 4

FINDINGS

The primary motivation for this case study was to uncover the opportunities that college access programs and their college advisers create for low-income and first generation college bound students. In addition, the study sought to identify the best practices used by college access advisers to influence their students' aspirations and matriculation into colleges and universities. The study also explored the ways in which college access advisers affected the college going culture of a school. This case study used mixed methods to collect data from multiple sources. The College Access Tool of Evaluation (CATE) was used for all 24 observations. The evaluation tool was designed to not only observe activities and services provided but to also observe the way college access advisers interact with students.

The first section of this chapter provides detailed descriptions of five of the six domains of the CATE. The second section presents the themes found in interviews with the five college access advisers as well as the best practices. The chapter concludes with the results of the Teacher Survey. The analysis of the data was guided and organized using the three research questions below:

1. To what extent, if any, are college access programs effective in creating opportunities for low income and first generation college bound students to matriculate into postsecondary education?

- 2. What best practices do college access advisers use to help low-income first generation college bound students believe that postsecondary education is attainable?
- 3. What evidence, if any, exits to document positive college going attitudes for students and teachers in a school with college access programs?

College Access Tool of Evaluation (CATE) Analysis

The CATE (College Access Tool of Evaluation), was used to observe the five college access program advisers working within the context of their programs during the second and third quarters of the 2014-2015 school year. The second and third quarters were chosen for observation because multiple college going activities take place during this time of the academic year. The six domains of the CATE focused the observations. The domains included:

- 1. College Going Activities and Admissions
- 2. Trust, Self-Efficacy, and Relationships
- 3. Professional Activities and Responsibilities
- 4. Academics and Testing
- 5. Building a College Going Culture
- 6. Financial Aid

The majority of the observations occurred in the school's College Access Center.

One of the other observations occurred at the National College Fair and another

observation was on a college campus visit. Multiple sites were used for the observations, which allowed for broader analysis of student and adviser interactions.

Using the CATE, 24 forty-minute observations were collected during the 18 weeks of data collection. Each adviser was observed between four and six times in 40 minute intervals. Each observation provided a deeper understanding of the processes advisers used to further their college access missions. The data from the CATE format was typed, transcribed, and organized using Bogdan & Bilken's (2007) eleven observation questions that are stated in Chapter 3. After the initial reading of the data, five of the six domains were chosen for further analysis. Domain 3, Professional Development Activities and Responsibilities, was not chosen for further analysis. Since Domain 3 deals with professional development and not with the interaction of advisers and students, it was not selected for analysis in this study.

Domains one, two, four, five, and six were identified as the observable areas in which advisers and students interact. Data analysis began with the qualitative method of the open coding process using Berkowitz's (1997) six coding questions that are listed in Chapter 3 "Methodology". After all codes had been detected, categories were created using Creswell's (2010) and Bogdan & Biklin, (2006) suggestions that are also listed in Chapter 3 "Methodology." Once the open coding process was complete, visual models of similar categories were constructed which led to the finding of core phenomena.

Selective coding was then used to find patterns that could be put in narrative form. The findings from this process are investigated further below. However, background information about the programs themselves is warranted for a better understanding of the similarities and differences between them.

Programs

A typology was used to organize the five programs and the 17 question Adviser Survey. The use of a typology was not meant to articulate a typological theory with this data alone. It was used more as tool of exploration to guide the five program descriptions. What can be noted is the different pathways that lead to similar outcomes which George & Bennett (2005) refer to as "equifinality" or the same outcome arising from different pathways. The typology is located in Appendix G.

Program 1: Access Now

Ryan Till is the college access adviser for the Access Now program and is responsible for approximately ten students at the participating high school. The program is tailored to serve students who are in the top 25 percent of their class. Students must also demonstrate an aptitude for science, technology, engineering, or mathematics. The program sponsors ten students to attend a six week summer program on the campus of William Penn University. The summer program gives students an opportunity to experience a version of college life before they actually begin their college careers. Ryan also meets with these students four times a year. He conducts needs assessments to make sure that the students are completing college applications, registering for SATs or ACTs, completing the FAFSA, and staying on track to graduate. He also stays in touch using an online program where the students can check in with him or email him college related questions. He has begins working with these students their freshman year.

Program 2: The Next Step

Anina Otte is the college adviser for The Next Step program. Components of this program include guiding students with the SAT/ACT registration process, the college

application process, and the financial aid process. One-on-One college counseling is also provided, particularly for the senior class. In addition to these activities, the program offers in school and after school tutoring. The Next Step also works closely with the school's guidance office and the two offices often co-plan college-going activities together. Otte places a great deal of emphasis on creating a college-going culture within the school and fostering the notion that all students can go to college. Next Step also works closely with the other four programs and opens up the Center for their use.

The program is different from the other programs in the study for several reasons. First, the program does not rely on student initiative for participation, meaning students do not have to choose to participate. College access services are provided to the entire student body. Because The Next Step is responsible for providing services to the whole school, the program and its College Access Center are housed within the school building and services are made available to the students every day.

Program 3: Full Speed Ahead

Brandy Burge is the adviser for the Full Speed Ahead program. She works with approximately 100 high school students at the participating high school. To participate in Burge's program a student must fall under a specific household income level and maintain a 2.0 GPA. Burge's time in the building varies because she is responsible for three other schools. She tries to be at the high school at least two days a week. Full Speed Ahead supports students by guiding them through the college going process beginning as early as seventh grade. Burge works with students in the younger grades to help them figure out what they might want to become by exposing them to different careers. The students each complete and online aptitude test that directs their selection

process for a possible career. She continues to advise the students once they are in high school. Burge also offers one-on-one counseling to direct their college exploration. In addition, she tracks their GPAs and she advises students to take college preparatory classes, which in turn supports their college going efforts in the high school context. Some of the components of her program include assistance with registering for the ACT/SAT, completing college applications, and planning college campus tours. After completion of the program, students are invited back as college freshman to speak about their first semester in college.

Program 4: Leaders of Tomorrow

Leaders of Tomorrow is a program designed specifically for delinquent or independent/emancipated youth. To participate in this program, a student either must be a low-income, independent, and/or involved in the Children Youth and Families system. They can also be a delinquent involved with the Juvenile Justice system. Students are referred by their caseworker or parole officer. At the time of this study, Sharde Lewis, the college access adviser, was working with three students in the school. Leaders of Tomorrow focuses on linking youth with support services as they transition from being in foster care or residential treatment facilities to being independent young adults. For example, the program has coordinated services for their students with one of the local universities to provide mathematics tutoring for involved students. In addition to advising students through the postsecondary application process, the program also assists students with independent living skills and helps students find housing and retain employment. This is a county initiated program.

Program 5: Pathways to Success

Pathways to Success is a program that grew out of the depletion of resources in this area of the state and is grant funded. Lamar Ford the college access adviser comes to the participating high school nearly every day. To participate in Pathways, students must be seniors and be low-income and/or first generation college bound students. Unique to this program is the job shadowing opportunity offered to seniors. Ford advises the students to think of a career, prepares them for the job shadow, and takes them to the work site. To follow up at school, he advises them with their senior project. The senior project involves the exploration of a career and a timely and controversial issue within that field. The student not only learns about a career, explores that career, and then researches and writes about that career for their senior project.

Similar to the other four programs, Ford provides one-on-one college counseling and assists with all college and financial aid paperwork. This year he was working with 40 senior students. The students receive a stipend for accomplishing specific program goals, getting out of school the rewards one would get out of employment.

Cultural and Social Capital

Beyond cost and academic preparation, Stephan (2013) argues that the lack of social and cultural capital may explain differences in whether or not and where low-income students attend college. Schuller, Baron, and Field (2000) define social capital as "the social networks, the reciprocities that arise from them and, the value of these for achieving mutual goals' (p.1). Cultural capital is then defined as behaviors, attitudes, knowledge, and preferences that families pass from one generation to the next that can later be invested for social or economic benefits (Bourdieu, 2001). Domain 1 highlights

the activities and components that can systematically create social and cultural capital and in turn affect educational attainment. Farmer-Hinton (2008) claims that cultural and social capital pertaining to college can be transmitted through:

- College as normative behavior
- College "talk" and resources
- Academic enrichment
- Appropriate post-secondary institutions
- Social service supports and social ties
- College as a viable option

Low-income college bound students can benefit from interactions with individuals who understand the process to matriculate into college and have actually gone to college themselves. Such relationships have the ability to reduce disadvantage particularly for students whose parents did not attend college.

The next section will present the findings of the College Access Tool of Evaluation (CATE) which was the evaluation tool used to observe the advisers in the context of their programs.

Domain 1: College Going Activities and Admissions

One of the purposes of college access programs is to engage students to perform activities that will build enough social and cultural capital to lead eventually to college acceptance and matriculation. Domain 1 examines student participation in activities that lead to college enrollment. The observable activities are listed in Table 2

DOMAIN 1: College Going Activities & Admissions		
College Going Activities & Admissions Indicators	Adviser Interactions & Indicators	
Evidence of:	The College Adviser:	
☐ Students completing or discussing college applications,	☐ Surveys student body for interests and needs pertaining to college admissions.	
☐ Students working on more than one college application,	☐ Plans college going events that are appropriate for students varied abilities.	
☐ Students attending campus tours,	□ Participates, plans and takes students to a college fair.	
☐ Students being accepted into one or more institutions of higher learning.	☐ Provides students with current college going resources such as college view books and other literature, college search online resources, and interactions with college admission representatives.	
	☐ Provides students with accurate answers to their college admissions questions.	
	☐ Listens to students and responds to their specific needs – activities are tailored to their needs not just program goals and outcomes.	
	☐ Is active in finding answers to student questions that he or she can't answer.	
	☐ Has an arsenal of student relationship building strategies and can converse and work with any kind of student.	

Domain 1 also explores the advisers' interactions with the students. It examines how advisers engage students to complete college-going activities such as researching careers and applying to schools. Using Domain 1 of the CATE, interactions with students and their advisers were observed. The focus was on how the adviser persuaded the student to participate in college going activities. The Counselor Interactions and Indicators were observed and noted on the CATE. The results are described in detail below in the following narrative.

One-on-One Planning Conversations

Before the students participated in any college going activity, the adviser administered a needs assessment survey. Refer to the example of a needs assessment example in Appendix H.

After the needs assessment, the college adviser created a plan with the student, however, the plan was just the first step in the exploration of a college and career path after high school. The plan was often revised because students' needs changed particularly among the seniors who were not sure about their future goals.

The following excerpt demonstrates such a student/adviser conversation between a student and adviser changing a plan.

"Ms. Otte! I need to talk to you," yelled Alexus with stress and frustration in her voice. 'I'm not going to the army anymore!"

"Grab a seat. Let's talk about this. What happened? I thought you were shipping off in July?" asked Ms. Otte.

"Well, I learned that the army wasn't really going to pay for my college. They were going to pay me a daily stipend but not actually for my college and that was the

only reason I joined in the first place. I really just wanted to go to college. Is it too late for me to apply?" inquired Alexus.

"No. Not at all," Ms. Otte answered.

"Oh, thank God," Alexus said taking a deep sigh of relief. "What do I need to do first?" she asked.

"First you are going to need to register for the SATs and soon because the deadline is Friday. Then we should start researching schools, completing the applications, and completing your financial aid." explained Ms. Otte.

The one-on-one counseling for a student who suddenly had a different realization about what the military had to offer proved to be a valuable conversation. Having the counselor available at any time during the school day seemed to be particularly useful. With the undivided attention of the adviser, the student began to think seriously about what she wanted to do after graduation. Reflecting the indicators in Domain 1, the adviser demonstrated listening to the student and responding with accurate information. A new plan was created tailored to the student's new needs.

Burge, from Full Speed Head, reflected on her one-on-one conversations with students. She explained that sometimes she almost had to force the students to think about their future. It was something students could not ignore or put off when they were in the Center with an adviser. Burge often helped student to confront realistic outcomes for college or career training programs.

Ford from Pathways to Success described how plans for seniors must be flexible because seniors tended to change their mind. He discovered that students wanted someone to listen to them as they talked about themselves and their plan. Senior plans

changed frequently. For example, after months of planning on going into the trades, Ford recounted how one of his students admitted that he had been thinking and was reconsidering going to college. It is evident that the advisers had to be just as flexible as the plans.

Senior indecisiveness occurred several times throughout the observations. However, the students were making serious decisions that had both social and financial consequences. Often times students who wanted to get away from their parents and go to college far away, decided that they were not ready to leave home, and opted for the local community college instead. The college advisers gave the students the tools and resources to change their plans at a moment's notice. After a plan had been developed, the student had to get on the computer and fill out an application in a timely fashion so not to miss a deadline. Changing one's mind not only happened with students who were going to join the military or attend a certain college but students who were planning to go to trade schools as well. They were caught up in the excitement of college and acceptance letters and would decide at the last minute to apply. One student asked incredulously "How do I do this?" He had been looking at the checklist the guidance office requires for each college application. The student looked to his adviser for the necessary information and the steps needed to complete the college application process. The guidance office at the participating school required each student to follow a specific process when applying to college that involved much more than just filling out the application. The assistance of the adviser was often necessary to complete all the steps correctly.

College Application Process

The college application process was outlined for the students on a form called the Transcript Request Form (Appendix I). Students had to complete seven steps before they could request their transcripts from the guidance office and it was part of the college advisers' role to see to it that students were completed the steps.

Lewis from Leaders of Tomorrow who worked specifically with foster youth said:

I look at my role sometimes as if I am the parent. There is just so much to
do beyond filling out the actual application. A checklist was created to
make this process easier, but students still tend to get confused or forget
things. The guidance office requires everything on the form to be
completed before turning it in to them so my role in the process is to make
sure everything is actually complete.

Otte from the Next Step explained the difficulty of completing all the forms. She said:

There is a form for everything. The students need to fill out forms to release their transcripts and forms to receive a wavier so they do not have to pay the college application fee. For students requesting letters of recommendation, there are forms for that. Then there is the addressing of the envelope. It is amazing how many students have never written out an envelope before. A lot of the time students double check with me about which lines to put the city and state or where on the envelope the address should be written. One time I had a student tell me he felt like a real man now because he was addressing his first envelope!

After the address was written correctly on the envelope, Otte affixed the correct postage and return address, and instructed the student to take his or her envelope to guidance to get their transcripts.

Post-Acceptance Discussions

A college adviser's work was far from finished once applications had been turned in and students had been accepted into colleges. The work following the acceptance letter included other instances where the advisers' guidance was important to move on to the next step.

Many of the students applied and were accepted into more than one college; therefore, the conversation about where one should go to college had to take place. Frequently a student just needed to see the price tag of a college to help him or her decide but sometimes it took a more in depth conversation as demonstrated in the dialogue below.

"Let's figure out where you are going to go," Ford said writing down all of the schools the student has been accepted to. "What are the big differences between all four of these?" He asked her.

"I know people going to those three," the student said pointing to the list. "And I don't want to room with a stranger"

"I understand what you are saying," Ford said. "So let's talk about the other three schools. What about the campuses? What did you like about the dorms? What about the food? Let's write down your thoughts for each of the three schools."

They continued this conversation talking about what the student would major in if enrolled in each of the three colleges. They also discussed the option of community college. Finally, Ford reassured the student, "Don't worry, we are going to find the best

school for you." The college advisers were needed to assist the student throughout the whole college going process from deciding where to apply to deciding where to attend. Therefore, the one-on-one counseling demonstrated both an opportunity for a student to engage in college going activities and an opportunity to build a trusting relationship with the adviser. Counseling was used as a best practice of the adviser to make the student believe that college was attainable

College Going Activities

The following activities offered an abundance of opportunities for students to participate in college going behaviors and they were all considered to be best practices of the five college access advisers. The college access programs all worked very closely with the school's guidance department. In the fall, the programs and guidance office came together to co-host Selecting a College Night and Financial Aid Night. Both of these events were intended to provide parents with information about the college going and financial aid processes. For Selecting a College Night, representatives from a four-year institution and the local community college came together to discuss the typical application process. Parents were invited to attend these talks through phone calls home and advertisements on the high school's website. In addition to selecting a college, advisers also reminded parents and students about registering for the SAT and ACT tests and provided scholarship search information.

In December, For Financial Aid Night, a representative from the state grant agency explained filling out the Free Application for Federal Student Aid (FAFSA) and the State Grant Application. Burge was asked to speak about loans and the difference between federal and private loans. She also reminded parents that allowing their students

to take out small loans for their education would not amass in tremendous amounts of debt.

Part of what may keep students from going into college is the fear of accruing debt. As Ford explained, "No one wants loans and some parents refuse to take them out or let their students take them out. However, it is almost necessary now if a student wants to go to a four-year college. Trying to convince families that their students will be better off in the long run is not always an easy discussion to have."

National college fair.

In the spring, the guidance department and three of the five college access programs pulled their resources and took three busloads of students to the National College Fair, which took place downtown in the city's convention center. Only juniors were permitted to attend. Burge said:

This is a great opportunity for the juniors and really gets them thinking about college. The students see other students from other schools "shopping" around for colleges, therefore looking for colleges becomes both normal and expected behavior for the day.

Going to the college fair seemed to inspire the students to begin to prepare to take their SATs later in the spring. It also encouraged them to visit schools in the summer.

Job-shadowing.

For seniors, who were further along in the college selection process, Pathways to Success had a unique job-shadowing component. With grant money from the federal government, students had the opportunity to select a profession and then were partnered with someone in that field to shadow their work. The experience allowed the student to

gain a better sense of the career and helped them decide if that field was right for them. In the following scenario, Ford is preparing two students for their job shadowing experience. He is reviewing information and expectations.

"Please wear khaki's tomorrow," Ford said to two male students, James and George one dressed in an Ohio State hoodie and jeans and the other dressed in his football warm up suit.

"I don't have khaki's, but I have Levi's that are khaki color."

Ford sighed jokingly: "Ok, please wear a collared shirt too. Also please let your teachers know that you are going to be missing school and most importantly turn your phone off tomorrow during the shadow. I do not want you checking it! Do not check your phone! If you check your phone, I am going to be very annoyed. If you have any questions tonight, you can text me. Make sure you ask questions and if you can't think of anything to say, use the paper I gave you. I will pick you up from school after second period and bring you back in time to catch the 3:30 bus."

It appeared that Ford was more nervous about the students attending the job shadow than James and George. However, because he expressed high expectations, the students were more likely to take the job shadow more seriously.

Campus tours.

Just as a job shadow provides a firsthand experience with a career, campus tours can make the goal of going to college tangible. One of the most exciting college going activities that the advisers planned for their students were the campus tours. The advisers chose to tour colleges that were both affordable and academically appropriate for their group of students. Much preparation went into these field trips. Arrangements at the

universities had to be made, busses needed to be ordered and permission slips from the students needed to be collected. In addition to the parent signing a permission slip, the student also had to sign a section that said they had read and understood the dress code for the day. The experience provided them more than just a tour and lunch. The day was also an opportunity for students to build their social capital and practice professionalism and college going behavior.

Otte said:

We enforce such a dress code because their appearance will be important to whether or not the admissions counselor gains a good first impression of the student. Before we go, we explain to them that the admission counselor, who decides if you are accepted or denied to the school, will be at the tour. We remind them that dressing appropriately will give the counselor a better impression of who they are. It's kind of like going on an interview.

In addition to the permission slips, Otte took the students' completed applications and transcripts, which saved a lot of postage money. Sometimes the admissions counselor would tell the students they were accepted immediately, which was exciting for the students. A student could begin the day as just another senior but end the day as a student accepted into a college or university. It was a very hopeful and uplifting experience for everyone involved.

The CATE was used to observe the advisers and the students on a college campus tour at Carter State College. The trip was paid for by The Next Step, but two other advisers, Burge and Ford, accompanied Otte as extra chaperones for the thirty juniors and

seniors who took part in the trip. It took nearly two hours to get to the college, and Burge kept reminding the students that it would be much faster if they were driving in a car. Several of the students had never traveled this far from home before and they marveled at the cows that they saw grazing alongside the road. Otte reminded the students that they were shopping for a school and would be spending a great deal of money so they should ask questions.

Upon arriving at the campus, the students and chaperones were ushered into a room in the admissions office where an admissions counselor spoke with them about Carter State. He reviewed topics such as size of the school, admission requirements, and tuition and fees. The students were given the opportunity to ask questions at the end of the presentation. Several of their questions about the cafeteria food, the size of the dorms, and specific majors were answered before the tour even began.

The presentation was followed by the campus tour lead by current students at Carter State University. The large group of students was divided into two smaller groups each with their own tour guide. The college student began the tour by heading straight for the dorms, which appeared to be what the students wanted to see the most. Surprisingly, all eighteen of the students and the two advisers fit into the model dorm room where the students began asking questions about roommates, bunking beds, cable, etc. The tour proceeded to the school's new science building. The tour guide discussed the new science building and the popularity of the science majors. He also and pointed out certain features about the construction of the building, however, the students were more interested in what a college classroom looked like. The students discovered that the

classrooms looked similar to the ones they had in high school but were equipped with expensive technology like projectors and smart boards.

The students were then lead to the student union building which housed the gym and recreation center. Here, the students learned that college was more than just academics, it was an introduction to adult life. At college, they would have the opportunity to do more than just study, and going to the school's brand new recreation center was one of those options. While at the rec center, the students were greeted by an alumnus of their high school who validated how positive of an experience college was. He also reminded the students to work closely with the college access advisers because without them he would have never made it to college.

The tour culminated with lunch in Carter's cafeteria. While the students took advantage of the all you can eat buffet, the advisers gathered to assess the morning. "Some of these kids have never been out of the city limits," Ford said. "For them, seeing a college campus is more than just shopping for a school. It is observing a whole different way of life." Burge agreed and said:

I think the college tours are one of the best things we do. It is hard when parents are working and can't take off to bring their student to a college campus. You should never decide to attend a campus or school you have never seen before, especially when you are spending all this money. That is why these tours are so important.

Otte added to the conversation:

They are also important because some kids are on the fence about

college. They are not sure if they want to go away to a four-year school. The tour gives them the opportunity to see what a college lifestyle would be like. Many times, the tours can convince the student to believe that college is right for them after all. They can see themselves on the campus and that is really important.

The college access advisers were able to take juniors and seniors on eight trips throughout the school year. The students had the opportunity to visit all the state owned colleges within two hours of their high school. They also saw two branch campuses of two large universities. A trip to the community college was scheduled for the end of the school year.

Class presentations.

The last college going activity captured by the CATE was a freshman class presentation. Otte and Burge visited the ninth grade social studies classrooms to discuss with the students the importance of grades, test scores, and higher education. Burge explained that most students wanted to go to college, but did not have the necessary tools to matriculate. Burge and Otte described the importance of the students' grade point average and how earning poor grades their freshman year could lower their overall GPA. The college advisers were hopeful that their message would be received and the students would take their grades more seriously.

The college advisers created four scenarios on the board using laminated pictures and magnets. They told the story of four high school graduates, one went to a four-year college, one went to a two-year college, one went into a trade program, and the last student chose to take a year off and save money while working at Sheetz. The students

asked many questions, most of them about accruing debt and how much money different professions made. The advisers told the story of these four students in five-year increments so the students could see that the two individuals who chose to go to college started out in debt but ended up making the most money after they finished their schooling. Burge explained:

We don't mean to scare the students and demand they go to college, but we want to show them the realities of earning potential for those who go to some kind of postsecondary school versus those who choose not to. They are very afraid of going into debt. You have to really explain that a monthly loan payment will not break them because they will be working in higher paying job.

The college advisers worked to portray a realistic picture of reality and always had the best interest of the students in mind.

Domain 1 Summary

The college access advisers provided multiple opportunities for low-income and first generation college bound students to begin to think about college. Through classroom presentations, college tours, job shadowing experiences and counseling conversations, the students began to understand the process of applying and enrolling into college. In turn, students experienced what colleges looked like, and what colleges required for admittance. These experiences together often culminated in a senior student completing and submitting a college application. Consequently, the actions of the college access advisers resulted in the students becoming more aware and self-assured about their future postsecondary school options.

Domain 2: Trust, Self-Efficacy, and Relationships

Covey (2006) argues that establishing trusting relationships is a precursor to accepting assistance. Therefore, the Trust, Self-Efficacy, and Relationships domain may be the most necessary or important component of college access programs. For low-income first generation college bound students, attending college may put them in a high social and personal risk situation (Bloom, 2007). Students may need to have formed trusting relationships with adults who attempt to build their sense of self-efficacy before they will participate in college going activities. One of the purposes of the CATE was to observe how trusting relationships were manifested between the adviser and the student and the instrument attempted to quantify or measure the types of interactions between the advisers and their students. The CATE was also looking for evidence of the observable activities that are listed in Table 3.

Trust, Self Efficacy, & Relationships Indicators	Counselor Interactions & Indicators
Evidence of:	The College Adviser:
☐ Diverse groups of students participating in college going activities requesting counseling, and using available college going resources;	☐ Demonstrates sensitivity for students cultural and socioeconomic backgrounds;
	☐ Is physically comfortable around students and vice versa;
☐ Students believing college advisers treat all students equally regardless of grades or test scores;	☐ Includes all students who are interested in participating and solicits the participation of students not yet involved;
☐ Adviser actively listening to what students say, following up when asked a question;	☐ Is aware of what goes on outside of college going activities or counseling;
☐ Adviser being willing to spend extra time on a task when necessary;	☐ Spends equal amounts of time with students regardless of their aspirations;
☐ Adviser being reliable and keeping promises;	☐ Makes all students, regardless of ability, feel welcome to seek out
☐ Students believing they can be successful after high school;	college going counseling;
☐ Students believing they can be admitted to a postsecondary institution.	☐ Remains professional without building a barrier;
	☐ Demonstrates through speech and body language a genuine interest in students' thoughts and questions;
	☐ Suggests postsecondary pathways that are realistic and attainable for each specific student.

Some of the indicators such as student beliefs in being treated fairly and believing they could be successful and admitted into a postsecondary institution were difficult to observe and quantify. The following scale was created in an attempt to measure and place a numerical score of the interactions between the adviser and the student that may have lead to positive student/adviser interactions.

- 0 = Student is present in the College Access Center, but beyond a polite greeting,no interaction takes place.
- 1 = Student is receiving assistance with a specific college task.
- 2 = Student is personally interacting with adviser but not working on a specific college task.
- 3 = Student is receiving assistance on a college going task and personally interacting with the adviser.

Personal interactions were defined as interactions that went beyond cordiality, such as "Hello," "How are you?" Etc. A personal relationship between the counselor and the student was indicated by:

- Name recognition,
- Personal interactions,
- Classes and college discussions,
- Extracurricular activities,
- Home life.

The advisers demonstrated that they knew their students by first name, and they were sensitive to their academic, personal, and social situations.

Of the 24 college access adviser observations, most college adviser/student interactions scored a three (Student is receiving assistance on a college going task and personally interacting with the counselor). The advisers knew their students well; even the advisers with higher caseloads could personally interact with any student working in the Center. They could remember students' names and college interests. Advisers remembered information such as where students wanted to apply or where they had already applied. If a student's application was incomplete, they remembered what step the student needed to complete. Each student who entered the door was personally greeted and immediately asked what he or she needed. Through these personal interactions, college access advisers provided students with the opportunity to discuss confidently their college going plans. Such interactions proved to be a best practice for all five advisers. Otte from The Next Step explained:

I am responsible for the whole senior class. Sometimes it's hard to keep everything straight and remember where everyone applied and who filled out their FAFSA. But since participating in the program is pretty much voluntary, I want the students to feel comfortable in the Center and knowing their name and their wants and needs is part of what makes them feel comfortable.

Students feeling comfortable discussing their college going plans was a necessary first step in the college going process.

Building Trusting Relationships

Before any college conversation could take place, the adviser had to form some type of trusting relationship with the student. The concept of trust is linked to the uncertainty or uncontrollability of the one's future. From the student's perspective, the whole idea of college makes for an uncertain future. The students may be the first people in their family who even thought about college as an option after high school. Earle and Cvetkovich (1995) state that allowing oneself to trust is the first step in experiencing new social environments and new opportunities. Though the concept of trust is difficult to observe, certain adviser behaviors were repeated with each student multiple times resulting in trust building. The four behaviors are listed below.

- 1. Personal Language
- 2. Competency
- 3. Persistence
- 4. Compassion

Personal Language

According to Maslansky, West, DeMoss, and Saylor, trust can be earned or lost by the way individuals communicate (2010). In their research, they found that personalizing language was a key component in building trust. They explained:

Perhaps the most important language change to make yourself real and build trust is to change the words "you" or "me" to "we" and "us." This simple change puts you on the same side of the table as your audience and changes the way your audience will perceive the whole conversation

(p. 67).

In the next excerpt below is an example of and adviser's use of personal language.

As Ford from Pathways to Success reviewed a portion of a student's senior project research paper with her, he said:

Let's begin with the introductory sentence. We have to figure out how we are going to use this statistic as an attention grabber. We might use that for the intro sentence. Let's look at your notes, number 127. What we'll do is put that detail there. Now what I want us to do is add that other detail here.

Ford used 'we' and' us' seven times in only five sentences referring to himself and the student he was working with. Personal language engages the listener because the speaker is sharing the experience with him or her. Using the words "we" and "us" helped the student to take part in an activity without the fear of having to do that activity alone. When speaking with their students, advisers made positive statements such as:

- We can do that now.
- Lets' sit down and figure this out.
- Where are we going to apply today?
- We can finish that tomorrow.

These were positive phrases of personal language that were often heard between students and advisers. In other conversations, the students themselves would use personal language. They said:

- When can we finish applying?
- Can we do this tomorrow?
- Should we look at any other schools?
- When will we know if I got in?

The advisers seemed to take on the role of the parent in many cases and wanted the students to feel that all the college going activities they were completing were a mutual effort. Approaching students this way seemed to make students less intimidated by a process that was unfamiliar to them. The fact that no one in their family had ever gone to college before was minimized. Burge recounted a conversation with a student who said:

"I have to do this alone, my mom didn't go to college and doesn't know what to do."

I would say, "No you don't. You have me!"

The student would then feel more confident about the college going process. It seemed that the use of personal language allowed the students to feel more comfortable about the college going process. The use of personal language seemed to be required for the adviser to build a trusting relationship.

Competency

According to Sztompka, the competency, or reputation of the adviser is an important trust building component. If a person or institution is trusted by others in a person's social circle, that person is more likely to consider the person or institution trustworthy without considering other factors (1999). Brandy explained that students talk and word travels well through the student body. When upperclassmen tell the younger classmen go to the Center for help registering for your SAT or applying to colleges, the underclassmen follow their advice. Peer pressure can be positive.

Because the college advisers had proven that they were knowledgeable, students who used their services told other students about their positive experience with college access advisers. As a result, more students inquired about similar services because they felt confident that they would get their questions answered. Otte explained further about the word getting out that the College Access Center was a "cool" place to spend time and get your college questions answered. More students began coming on their own and Otte did not have to go out and solicit the Center's services anymore. The competent adviser may become knowledgeable in the eyes of the student and is therefore trusted.

A few of the advisers demonstrated their competency by presenting college process knowledge in the social studies classes. They spoke to the students about the importance of getting a college education and how to choose a college. They explained the requirements for some of the popular colleges and how to apply for financial aid. By going into the classrooms, the advisers were able to disseminate an abundance of information to a captive audience and therefore prove their competency to students who were unfamiliar with the college access programs.

An additional outcome was that teachers also trusted the competency of the college advisers. They would not hesitate to send students to the Center with college and career related questions. With the competent reputation of the advisers, guidance staff also sent students who needed to register for the SAT or complete college applications to the College Access Center.

The five advisers demonstrated in depth knowledge about the college going process, the financial aid process, and other academic matters pertaining to students such as the senior project. Ford knew the guidelines for the senior project so well that he created his own method for completing the writing section. Some of the other college access advisers had become so knowledgeable of college going processes, such registering for the SATs or completing the FAFSA, that the students did not fear making an error. Otte explained:

I've done so many FAFSAs, I know the questions asked without even looking at the screen. Some students are afraid to click on anything without you telling them to click this or click that. Knowing answers to questions that the students have no clue how to answer, I think, makes a student feel like no mistakes are being made.

Another adviser Burge, would research answers to questions a head of time to ensure that students were being provided with the correct information. She believed that if she did not have an answer to a question, she should research the answer with the student there. This way, she was ensuring that the student was provided with the correct information.

Burge then added:

For example, sometimes I don't know the exact tuition or SAT requirement for, all the schools the students are applying to. When this occurs, I will sit down next to them and search for the tuition or SAT score. By doing this, I can also show them how to search for such answers on their own. If you want kids to trust you, you can't afford to make things up.

Advisers had to teach students how to find the answers to their questions so that in the future they could independently search out accurate information to answer their college going questions. Therefore, the students become confident in answering their own questions as a result of their relationship with a competent adviser.

Persistence

Another observable practice in Domain 2 was persistence. Many students may be hesitant to begin doing something they have never done before. This fear of the unknown may sometimes come off as defiance or apathy when the student chooses to do nothing. Advisers remained persistent and consistent when they encountered difficult situations such as in the excerpt below, which took place during after school tutoring.

A student sat sideways in a chair speaking with a friend. When Lewis approached the girl and asked her what work she had to do, the student looked at her in disdain and answered that she did not have any work. Lewis then suggested that the girl check on her grades as she went to get a grade tracking sheet. The student rolled her eyes and continued talking to her friend with her back turned toward Lewis. Lewis, however, remained persistent and sat down next to the student. She opened the computer program that allowed students to track their grades. As time passed, the student started to turn her

body toward Lewis, and soon they were sitting side by side going over the student's grades. It seemed that Lewis's persistence expressed her care and concern for the student. She was not just looking for busy work for the student to complete. Her goal was for the student to check her grades. The student noticed this and may have perceived Lewis's persistent efforts and choose to participate in checking her grades.

It is interesting to note that during the periods of observation, personal one-on-one conversations were more likely to occur with advisers Otte and Ford. These two advisers were in the building almost every day. As a result, they could continuously remind students of deadlines and track students down when they had incomplete college or financial aid applications. Observations showed that persistence played a role in establishing trust and relationships. The students seemed to appreciate the constant reminders and the follow up from the adviser after a task was complete.

Otte said, "We are here every day. Students can just drop into the Center whenever they need something. Most of the time it's college related, but sometimes students are just looking for someone to listen to them. If you miss a day, they want to know where you were." Students were very aware of the presence of their advisers in the building on a daily basis and felt more confident when advisers were available to assist them as they worked their way through the college going process.

Many of the participating school's students came from low-income families and resided in negative neighborhood environments. Other students had been in and out of the foster care system. Gaining these students' trust was considered a great feat. Ford explained, "Once you earned their trust, you never wanted to lose it so you had to remain consistent. If you said you were going to do something for a student, you'd better do it,

or that trust would be gone and you would have to start all over again." Ford believed that advisers had to remain persistent, stick with a student's plan, and not let him or her slip through the cracks. This persistence, Ford believed, prevented students from not completing necessary college going tasks.

Compassion

College advisers could use personal language as well as be persistent and competent but still be unsuccessful in assisting students to matriculate into college. Another way college advisers worked to build trust with their students was to show compassion and take an interest in their lives outside of the College Access Center. The advisers would engage students in conversations about their sports teams or after school jobs. They would ask them about their grades in their classes or their stress level over their senior project. As mentioned earlier, many of the students were not coming from supportive environments. It was important for the advisers to recognize this and do what they could so that home life was not a limitation for the student. Some students did not have the money to pay for college applications or SAT/ACT registrations. Advisers would often call the college or university the student was applying to and request a fee waiver on the student's behalf. They reminded students they could take the SAT or ACT using a waiver instead of paying the \$52. Perhaps most importantly, they listened and they listened intently to what the students had to say, even if it was not college related. Conversations demonstrated the college adviser's concern for their students outside of school. Such one-on-one communications could strengthen trusting relationships between college advisers and students.

Compassion may be the component the solidified a relationship between adviser and student. The component of compassion creates a trusting relationship that culminates in the completion of college going activities.

Self-Efficacy

The college access programs seemed to rely heavily on their college advisers' ability to connect and form relationships with their students. All five of the programs were technically voluntary for students with the exception of the Next Step program. Therefore, it was up to the student to participate and use a program as a vehicle to their postsecondary success. A significant outcome that is often the result of the formed relationships is a student's increased sense of self-efficacy, or the belief or confidence one has in one's self and one's abilities. Through the adviser /student relationships, students began to believe in their abilities to apply and be accepted into college.

When an adviser said to a student that we need to apply to this school, you will definitely get in. Come on, I will help you with the application; the adviser had created a language of constant support between the student and him or herself. In this environment, students became comfortable with the college application process and realized that it is not that difficult. The students often knew all the answers to questions on college applications but they may have needed the support and encouragement to actually sit down and complete the application. After students saw how uncomplicated most college applications they felt confident to complete them independently in the future. Till from Access Now noted that sitting down with a student the first time they complete an application built the necessary self-efficacy to apply to other colleges on his or her own.

Building self-efficacy was observed as an important component of the language of support. Students needed to believe in themselves before they were willing to complete a college going activity. Once self-efficacy was built students could independently complete college going activities with more self assurance.

The four trust components, personal language, competency, persistence, and compassion, may lead to the development of trusting relationships. For first generation and low-income students, these relationships may be fundamental to their decision to pursue higher education. The college adviser may be the first person to have ever suggested college as an option for the students. The college adviser is faced with the task of convincing the student to make an enormous personal and financial decision that often no one in the student's family or social circle has ever made. Relationships between students and advisers are paramount when it comes time to make the final decision about attending college. During an observation, an adviser shared a very personal thank you note that had been written by a student. The note demonstrated the strength and the importance of advisers' relationships with their students:

It's amazing how much you helped me my senior year without me realizing. Being all that was going on with me-being homeless and not graduating, missing school, poor grades and my depression, you're telling me "what do you have to lose by sending in the application" and making sure we were on it with our financial aid. Receiving the acceptance letter from Edinboro pushed me. Edinboro has a program called ESP for people who don't have the best grades, attendance or SATs. So far my grades are perfect. I'm in about 5 student organizations, pledging AKA next semester

and in charge of Black planning on campus for black students putting together the first and biggest fashion show Edinboro has ever seen. I'm the happiest I've ever been in my life; my family is behind me, and for the first time happy. And I've gone from being the most hated in school, to most popular and it's beyond a weird feeling. I want to say thank you so much for pushing me. I try to imagine where I'd be if I didn't have that push... maybe McDonald's with kids in the projects. I will send you the presentation. It received a 91%"! (personal communication, September 14, 2013).

The adviser had obviously formed a very close relationship with the student, one where the student trusted the adviser enough and felt confident enough to take a risk and apply to college. The note expresses how successful she was performing in college because she had developed the right amount of confidence and self-efficacy.

Domain 2 Summary

Though difficult to observe directly, Domain 2 captured many behaviors and indicators that depicted the concept that trust was being built between the adviser and the student. Through the concepts of personal language, competency, persistence, and compassion, advisers were able to form trusting relationships with their students. Trust building could stand alone as the most important activity an adviser could do with a student. Trust as a social support is what leads to self-efficacy. The relationships between adviser and student provided the students with many opportunities to contemplate and discuss matriculation into postsecondary education. In addition, building trusting relationships with students was a best practice of all five advisers.

Domain 4: Academics and Testing

Enrolling in classes that provide a rigorous core curriculum is essential for any college bound student. Students who take challenging academic courses tend to be more successful their first year of college and continue on to their second year. Preparation through rigorous coursework can overcome any academic disadvantages or achievement gaps created by being a first generation or low-income college bound student (ACT, 2010). In addition to completing rigorous coursework, those students with higher test scores and higher grades are also more likely to attend and graduate college (Roderick, Nagaoka, & Coca, 2009). The purpose of Domain 4 was to examine the ways in which college advisers work with their students to overcome some of their academic disadvantages and prepare them for the rigors of college. The observable behaviors that make up Domain 4 are listed in Table 4.

Table 4.

Domain 4: Academics and Testing

DOMAIN 4: Academics & Testing	
Academic & Admission Testing Indicators	Adviser Interaction & Indicators
Evidence of:	The College Adviser:
☐ Students enrolling in AP classes;	☐ Refers students to tutoring services when applicable.
□ Students passing Algebra II or a higher math class;	☐ Creates academic materials/curriculum for students.
□ Students graduating on time;	☐ Clearly explains SAT, ACT or PSAT Scores.
□ Students taking the SAT;	☐ Provides SAT/ACT prep opportunities.
□ Students taking the ACT;	☐ Accurately answers grades and test score related questions.
□ Students taking the PSAT;	☐ Asks students grade and test score related questions and offers
☐ Students raising their high school GPA;	feedback.
☐ Seniors meeting all Senior Project Deadlines.	□ Communicates with teachers and guidance counselors.
	☐ Accesses students' most current grades.

Domain 4 sought to understand the processes and activities that led to a student raising their high school GPA and increasing their academic achievement.

Four of the five college access programs listed grades, appropriate college preparatory classes, and poor SAT/ACT scores as barriers between their students and a college acceptance letter. Each program had its own unique way of addressing the gaps in a student's academic history. However, interestingly, only two of the programs, Access Now and the Next Step, offered direct tutoring or remediation opportunities for students.

Summer Academic Experience

Access Now focused on a summer academic experience. Till's program actually provided remedial paced classes specifically in the sciences. CareerVision.org (2015) states that jobs pertaining to science, technology, engineering, and math will be among the most in demand careers. As of today, too few American students are majoring in these rigorous areas of study forcing U.S. companies to look beyond their borders for potential employees. Access Now meets this issue head on by offering an academic enrichment program in the summer for high school freshman, sophomores, and juniors considering a STEM degree. Students spend six weeks attending classes on a college campus enrolled in courses such as physics or chemistry. They are given the option to take the science that they will take in the fall in high school. Another option is that they can repeat the science they already took in high school to strengthen their skills.

What seemed to be the most academically beneficial aspect of this program was conducting original research with a faculty member. The students took on the role of graduate assistants for the summer and assisted professors with their original research. At

the end of the summer experience, the students presented the research to each other and to a panel of judges. Awards were given out based on different research categories.

Adviser Till explained the experience. He said:

It is a really awesome opportunity for the students. They are only high school students, but they have the opportunity to work with real faculty members on their original research. Sometimes I think the students don't know what an opportunity this is for them until it is time to ask for a letter of recommendation for college. Having a professor from the college you are applying to write your letter of recommendation almost guarantees that you will be admitted to that college.

He also shared that the students came back at the end of the summer with a new sense of self-confidence. They believed they belonged in college and were excited to apply when school began again.

Tutoring

While Access Now provided the majority of their academic services in the summer, The Next Step focused on the school year. Otte's program offered in-class and after school tutoring. The tutoring program was created with freshman in mind; however, students from all grade levels could use the after school tutoring services that took place in the school's library. In addition to Otte, three additional adult tutors were available to help students and answer questions. The library was often full after school and especially full on days before big projects were due.

Otte had recruited upperclassmen who were doing exceptionally well in their classes and needed volunteer hours to work as tutors after school in the library. Otte said,

"This is the perfect opportunity to rack up some volunteer hours which colleges like to see on applications or resumes. Plus the kids who are struggling in class are receiving the help they need. It's a win-win," Often peer tutors were more effective with underclassmen because the younger students seemed to feel more comfortable with an upperclassmen peer tutor than with an adult tutor. Peer tutors were more often familiar with the content of the classes that they had already taken than the adult tutors. Therefore, peer tutors were more efficient and relevant teachers.

Unlike traditional tutoring programs that function after school, The Next Step also put tutors into the classrooms during the school day. They were able to work with students on a one- on-one basis that was not always possible for the regular classroom teacher. Academic tutors were placed in English, Algebra, and Biology, the three subjects tested by the state at the end of the school year.

The advisers who focused on preparing students to gain college acceptances also offered academic support for the upperclassman. Colleges evaluate a student's readiness for college based on three indicators: required and rigorous coursework, grade point average, and college entrance exam scores (Roderick, Nagaoka, & Coca, 2009). The college advisers had support services in place that were designed to increase the students' grades and standardized test scores that in turn increased their chances of going to college.

College Entrance Exam Support

All five of the program advisers attempted to aid in the college entrance exam area. The College Access Center was the hub of SAT and ACT registration. It was equipped with the computers to register for the test, the camera to take the individual's

picture, and the College Board hotline in case they ran into any issues. For many students who were juniors this was their first one-on-one experience with a college adviser. The advisers patiently sat next to the students and guided them systematically through the registration process. Even though they may have registered twenty students that day, the advisers never rushed a student through his or her application and took this opportunity as a chance to become acquainted with the student.

The advisers were also available to discuss the students' scores when they received their score reports. The day the SAT scores came in was a day of nervous anticipation for the students and the advisers too. The advisers made a big deal out of those students who had done well, particularly if it was their first time taking the test. For the students who had not done so well, the advisers were gentle when discussing with the student that he or she should take the test again.

Students who do poorly on the test are often from lower economical backgrounds. Research conducted by the ACT (2010) found that higher test scores were often linked to higher family incomes with a 250 point difference between the lowest socioeconomic level and the highest socioeconomic level. College advisers attempted to close that gap by providing students with resources and materials they could use for test preparation. For instance, students could check out SAT or ACT study guides from the Center's library. They could also get online and use the school's subscription for the College Board's online study program. They were even told about the "Question of the Day" app, which they could download onto their phone. The advisers stressed the importance of the SAT/ACT tests and that studying could improve their scores greatly. Students were

advised also as to which schools to send their scores. Speaking to a student after she had completed her SAT registration online Burge said:

Here is your ticket. I am going to keep a copy just in case you lose the original. Why don't you put the date in your phone right now so you don't forget. You will have to be here by 7:45 at the latest. Also, don't forget to bring pencils and especially your calculator because you will need it on the Math sections. I would bring a snack too. You are going to get hungry.

The student left, ticket in hand and test date in her phone. Burge then said, "I know I sounded like her mother but if you don't provide them with the information, they won't think to ask for it. You almost have to anticipate what questions they should be asking."

The college advisers could register the students for the SAT or ACT but the student actually getting up early on a Saturday morning and getting to school was sometimes an issue. Burge explained:

Transportation is often a problem with our students. Often their parents are working on the weekends and it is really difficult for them to get rides. I know one student who in desperation called a jitney to bring her to the school. It is even harder for the students when the test is not being held at our school and they have to find transportation to one of the neighboring school districts.

The college advisers found that fewer students took the SAT when it was only offered at other schools. They had to take advantage of the times it was offered at their school, which was just twice a year.

To minimize this problem, a few of the college advisers decided to start offering the ACT at the school, which had never been offered before. They gave the test four times a year therefore, they provided the students with more opportunities to take a college entrance exam in their own school were they feel more comfortable. Providing students with the opportunity to take the SAT or ACT exam was paramount to their college matriculation.

Academic Counseling

Beyond college entrance exams, a best practice of the college advisers was to pay a great deal of attention to the classes students were taking and the grades they were earning in those classes. Three of the five advisers had access to the students' most current grades through an online program that showed the missing assignments for each class. Advisers could print out their students' grades and sit down one-on-one to discuss students' successes and shortcomings.

The importance of a high GPA was always emphasized. Studies have shown that high school GPA was a better predictor of whether or not a student would enroll into a four year college than their ACT scores (Roderick, Nagaoka, & Coca, 2009). College advisers repeatedly reminded students, especially the juniors and seniors, how important their GPA was for acceptance into a college of their choice. Lewis said:

We like to drill the number 3.0 into their heads, however not everyone has such stellar grades. A lot of the kids who are failing or earning low grades are simply not doing their work. It is not that they don't know the material, they just never turn anything in. When we sit down and go over missed assignments, often times they did the work and just did not turn it

in or they missed some school and are behind on their assignments. The Center is open every day after school until five, and I encourage them to come down and just take advantage of the nice quiet atmosphere where they can get their work done without being distracted.

Many college access programs focus on just the college and financial aid process and neglect the academic piece. However, without appropriate grades, a traditional four-year college or university may not be attainable. The advisers did not ever want to be "dream crushers." However, they remained realistic when students with poor grades talked about applying to an Ivy League school. Ford shared his strategy. He said:

Many of my students do not even think about college as an option until their senior year and are not aware of the requirements of some of the more popular colleges and universities. I never want to be the one to crush their dreams so when a student with less than the required GPA wants to apply to a school that they have no chance of getting in, I let them look up the academic requirements. It's an important self realization for them and then they can begin to think about other postsecondary options such as community college or technical school.

Beyond just discussing grades and GPAs with students, college advisers attempt to help students improve their grades as well.

Senior Project

For seniors their GPA and SAT/ACT scores are not the only academic challenges they face for a successful senior year. The most important assignment of senior year was the senior project research paper. The assignment forced students to practice their

reading, writing, and research skills on a level that would make them ready for college level material. Conley (2010) suggests that these skills along with analytical thinking skills are what many students are lacking when they enter the college classroom. The advisers worked with the students during the research paper process in an attempt to assist students with building those necessary skills. Otte said that the students were intimidated by the whole research process, which was a fear they needed to overcome if they were going to be successful in college. Burge also observed:

The project really should not stress them out so much. It's a minimum of five pages on a controversial issue related to their career path. This year the popular controversy was police brutality and one third of the class chose to write about this. They also have all year to do complete it! They may have a paper like this once a week when they are in college. But we do our best showing them research strategies for the internet and helping them outline their paragraphs and complete their works cited pages.

The advisers seemed to spend a large amount of time, especially around due dates, working on this project with the seniors for whom the project was a graduation requirement. Much of this time was spent after school working in the Center or in the library. After several years of working with seniors on the project, Ford knew the procedures and requirements for the paper so thoroughly that he created his own practical method of outlining to assist students with the writing process. While working with a student, he said:

Try and see if you like how this sounds any better. Look, introduction, fact, detail and repeat. Give me a fact from your notes. Watch, the fact

goes here and you build the rest of the paragraph around that fact. Does that make sense? I can't write your whole paper for you. Use this strategy and you can write the rest of the paragraph on your own.

Because Ford had taken the time to speak with the senior English teachers, he was able to help the students completing the assignments in the proper context. There was actually continuous communication between the advisers and the teachers. The advisers had to form lines of communication with the teachers to assist the students in completing the project.

Class Scheduling Support

Beyond helping students with actual class work, another best practice of the advisers was discussing course selection with underclassmen when scheduling their classes. A survey conducted by the ACT (2010) found that 43 percent of 10th graders who stated their desire to earn a bachelor's degree were not taking college preparatory classes. The advisers informed students in the younger grades about college requirements and suggested which classes to take. Lewis added:

If you are serious about college you should be taking higher level math and science classes. Students who are serious about college should be taking the honors or A.P. sections of those courses. Some students want their senior year to be "easy" so they opt for the lower level classes even though they are cable of higher level work. We have to remind those students that colleges are going to receive their class schedules and they are looking for students who have taken a rigorous curriculum. After all, that is what prepares you for college.

Advisers were able to provide students with information about what type of academic classes colleges were looking for students to take. This was especially useful if they were the first in their family to attend college.

Advisers also helped students at the lower end of the academic spectrum. In addition to referring them to after school tutoring, they took the time to sit down with students and explain the different course requirements for different majors. Burge said:

I have many students who say they want to aspire to be a certain profession and have no idea what it takes to get there. I have nurses who have failed biology and engineers who hate math and science. With these students, I gently suggest they think about a back up career. What works even better is to find out the classes they would have to take in college and provide them with the information. A list of physics and calculus classes usually is enough for them to change their minds and think about a more realistic major.

These one-on-one conversations were eye opening for many of the students. However, the knowledge of the nature of the field they thought they wanted to study was helpful. It allowed them to research other careers that better reflected their interests and abilities.

Domain 4 Summary

Low GPAs and entrance exam scores are a huge barrier that keeps many lowincome and first generation students from being accepted into college. The college access advisers attempt to help students overcome these barriers by providing tutoring, academic enrichment activities, and college entrance exam support. The opportunites to take college entrance exams and earn strong grades in difficult classes were paramount in a student's ability to matriculate into college.

Domain 5: Building a College Going Culture

Welkin (2013) argues that physical space and emotional space are factors in the creation of a sense of trust and safety. The college access program advisers were able to foster their relationships with students by creating this safe and purposeful space in the College Access Center. The College Access Center or CAC was the hub of all college going activities and the center of the school's college going culture. Advisers began building a college going culture within the space of the room. The students had the opportunity to experience a space where the concept of going to college was eminent. This attitude has since expanded to other areas in the school. The library is now being utilized for after-school tutoring and faculty now come to the library after school to answer students' questions. Also, teachers allow the college access advisers into their classrooms to discuss college with their students. In addition, teachers send students to the College Access Center to register for SATs, apply to college, and complete their senior projects. Community members, hone-schooled students, parents, and alumni also visit the College Access Office for information, assistance completing forms, or just constructing a postsecondary plan.

However, building a college going culture is not always something that is easily observable. The purpose of Domain 5 was to find evidence of activities that had been completed that could indicate the presence of a college going culture. The evidence and indicators are listed in Table 5 below.

Table 5

Domain 5: Building a College Going Culture

College Going Culture Indicators	Adviser Interactions & Indicators
Evidence of:	The College Adviser:
☐ High school students who can name four colleges or universities;	☐ Participates in school wide and community events to advertise the possibilities of college.
☐ Students who identify a four year college as part of their postsecondary plan;	☐ Suggests appropriate two and four year college options based on individual students' abilities and financial situations.
☐ Senior families participating in financial aid and FAFSA completion sessions;	☐ Provides students with opportunities to meet alumni who have graduated from college.
☐ Underclassman who know their GPA and the average GPA required for a four year college;	☐ Provides faculty and administrators with college related information.
☐ Students who know where to go to ask college	☐ Builds the resources for the college going culture in the building.
related questions; □ Teachers and parents who believe that the majority of the students can attend college.	☐ Is viewed as a trusted, consistent, and stable adult who is always positive about a student's college going abilities and makes all students feel confident about going to college.
	☐ Communicates with teachers and families about their student's college going and financial aid options.
	☐ Is known as a trusted resource by the faculty and staff for all college going questions.
	☐ Communicates with administrators about evidence of positive changes in the college going culture of the school.

The College Access Center

The College Access Center provided the first evidence of a college going culture. The room was created to complete college going activities and advisers worked from this space. Students arrived there with the expectations that their college questions would be answered. Adviser Otte observed that the kids acted differently in the Access Center compared to their behavior in the hallways or other classrooms. She went on to explain:

Kids could be goofing off in the hallway, so loud we can hear them through the walls, but when the door to the Center opens, it is like they turn into this mature, respectful college bound student. The students really take pride in the Center and they really do try to act like college students when they are in here.

Introduction to the Center, it seemed, was the necessary first step in encouraging students to demonstrate college going behavior. This is particularly interesting since the concept of space is under theorized in education research (Leander, Phillips, & Taylor, 2010; Gulson & Symes, 2007). However, from observations the space in the College Access Center enhanced and contributed to the growth of the college going culture in the school.

Specifically, the Center, formally a drafting classroom, had morphed into "the best place in the school." The ceiling was lined with college banners from all the colleges graduates were attending. Otte went on to say:

We ask the graduating seniors to send us a banner from their college that we can display on the wall. The underclassman will come in and look at the banners and they begin to learn the names of popular colleges. It also

helps them to know that a fellow student is attending that school. It gives them a sense of, "I can do that too!"

In addition, the classroom teachers were also asked to bring in a banner from their college or university to represent their school. The banners lining the ceiling created a positive atmosphere adding to the purpose of the room.

Otte from The Next Step was the adviser essentially in charge of the Center. Her office was also located in the same space. She had a table set up that could seat up to four people and that was where she conducted most of her one-on-one discussions. The table was pushed up against a wall decorated with acceptance letters belonging to this year's seniors. At the top of the wall was a banner that read "We Got In." Otte explained:

This is one of the most popular attractions in the room. Students love to look at where other students were accepted or see how many acceptances certain students have obtained. It's fun to see them come in, so proud, with their letters. It is really important to them to be recognized on the wall. The underclassmen like to look at the wall too. They like to look at the names of colleges, which is good because it helps them develop name recognition of a variety of schools.

The "We Got In" wall had grown so large, it continued over onto the adjacent wall. By the end of the year, the entire room was wrapped in acceptance letters for this year's seniors. The wall was a visual representation of the purpose of the College Access Center.

The steps of the financial aid process were depicted on a bulletin board titled "Show me the Money." On the counter below the "Show me the Money" bulletin board were magazine holders and baskets containing financial aid information, literature on the importance of going to college, and pamphlets about enlisting in the military. There were two clear magazine holders with useful financial aid handouts and scholarship information for students and parents. Information was not only available to the students but the parents who came to the center as well. The space was also used to assist parents with completing the financial aid process.

The center of the room, which was supposed to mimic the set up of a college admissions office, was covered with a large oriental rug. A brown couch, love seat, and matching chair made up the rest of the mock admissions office. Students liked to gather in this space the most. Adviser Burge, who spent a great deal of time in the Center, shared:

Students usually fight over who gets to sit on the couch. The novelty of admissions office furniture in school is very appealing to them. I think it is one of the reasons they like it so much in here. It is not set up like a classroom. It is also a great set up for smaller group sessions and when college representatives come in they can hold their small group seminars in this comfortable space as well.

The makeshift admissions office was flanked on both sides by two islands of computers, which were available for students to complete their assignments or college going activities. One section had eight computers configured in a square and the other section

has four in a single row. A poster with the Eight Steps to College hung on the door. A big 3.0 was written on the green board in yellow chalk. Otte explained:

When we first started college access programming, students didn't know what a GPA was let alone their personal GPA. I went into every freshman and sophomore social studies class and did a lesson on the importance of a high GPA. I explained to them that the higher their GPA was the more college options they would have senior year. When I went into the upper classrooms this year, most of the students knew their GPA and that they needed a high GPA to get into college.

Another corner of the room was labeled the College Corner. In this corner was a four drawer file cabinet filled with college literature from representatives who had visited the high school. Next to the file cabinet was a gray metal shelf loaded with the state school applications and folders of information on the most popular schools to which students were applying. The literature about two year college programs was kept on the top of the gray shelf. Otte said:

Not every student wants to go to a four-year college or university. Many of our students begin their college careers at the local community college. We have other kids that choose to attend some of the two-year vocational programs in the area. In the Center, the term college really means any kind of education after high school.

Allan and Catts (2015) contend that educators can create opportunities for developing social capital amongst students by using specific spaces. The Center was a space designated specifically for college going activities within a very large high school.

Putnam (2004) argues that college advisers can encourage casual and uncomplicated relationships in created spaces. The meaning of the space is created by the discourse between the adviser and the student; as a result, the adviser can create a safe and positive space for his or her student. This concept is what generally occurred between college access advisers and the students within the Center.

Social Capital

With all the activities and opportunities going on in The College Access Center social capital is fostered. Schuller, Barron, and Field (2000, p. 1) define social capital as "social networks, the reciprocities that arise from them, and the value of these for achieving mutual goals." As one's social capital increases, one's educational disadvantages decrease. This is especially true of low-income or first generation college bound students. When students have the opportunity to build their own social networks with people who possess college knowledge, their social capital is enhanced. These networks in turn, assist the student in his or her college plans. College matriculation is the mutual goal shared by the students and the college advisers.

"Best Place in the School"

All five college access program advisers sought to make a students' experience in the Center a positive one. Burge from Full Speed Ahead explained, "If you can get a student to come into the Center just once and make it a positive experience for them, that student is likely to come back. Yesterday two students came in to register for the SAT and today they came back to research colleges." Enticing students to come in to the Center was necessary to get them to begin thinking about their future.

One of the ways advisers made the students experiences positive was by having an encouraging attitude towards the students and their desire to complete a college going activity. Ford from Pathways to Success said, "Sometimes I feel that a student can fill out an application or register for the SAT on his or her own. But often times, the student needs encouragement to actually finish the college going task." Students seem to return to the Center because they know the adviser working with them would not let them quit before a task was complete.

Another component that led to a positive student experience was the competency of the adviser. Otte said:

Students can come into this space knowing it is a one stop shop for getting all of their college questions answered from applications to financial aid to scholarships. The teachers and administrators seemed to recognize this as well, and they stop in with their personal college questions. The phone is often ringing with calls from the guidance office about registering students for the SAT or calls from the Athletic Department asking for help signing students up on the NCAA eligibility website. Other teachers came in to admire the 'We Got In" wall or refer students to the Center with any college or postsecondary planning questions.

The Center was on the tour for all new students entering the building. Those new to the building understood the emphasis placed on college attendance in their new school. Otte said, "The students come to understand that the space is here for their benefit, and once they realize this we see them all the time. The kids tell us it is "the best place in the school."

A Safe Space

The Center is also a safe space in the school. Welkin (2013) defines safe space as a concept with both physical and psychological dimensions. Students have permission to risk to dream of a better future in this space. There is someone to listen to the students as they plan their futures without the fear of being ridiculed or unsupported. The purpose of obtaining postsecondary education becomes everyone's common goal, and as a result, diverse groups of students find themselves in the Center at the same time all with the same agendas and goals. Because of this space, commonalities become more important than differences. Ford said, "There is no stigma that being smart and wanting to go to college is looked down upon or not cool in this space." Students no longer ridicule each other for having the goal of going to college because of the positive college going culture has been established in the school due in part to the College Access Center. Students who may have viewed college as a far away unlikely dream can actualize that dream in this space.

A Place of Service

The Center was also a place of service. Students knew that this was the place to get their questions about college answered. However, it was also the place to have a conversation about one's future with an adult with college knowledge. Students unsure about their futures sometimes hesitated to begin such a conversation and would not necessarily think to stop into the Center on their own. To make sure all the students had the opportunity to discuss their plans, Otte put into place a hall pass system with the teachers, "We write out hall passes for the students we need to see and put them in the teachers mailboxes," explains Otte. "So it's up to the teacher to release the student from

class. Most teachers are pretty good about letting students come down to work on college related material," she then added:

This is one of the ways the college culture of the school has changed. When I first started working here, college advisers had to go out into gym classes or lunches to see students. The students and teachers were not real sure about what College Access did and so a lot of students would not come down when asked. Now so many students come to the Center on their own and they know that when they get a blue pass from us they are getting some one-on-one time to talk about their futures.

A Change in the Culture

The change in student and staff behavior was attributed to the consistency and presence of the college access advisers within the building. Being out in the halls, talking to senior level teachers, and advertising college going activities allowed for Burge to earn the title of "The College Lady." Otte was sometimes called the FAFSA Lady because she was constantly asking students if they have completed their FAFSAs. "I think once the students and the teachers realized what we knew what we were doing, more of them started to participate in our programming," said Otte.

Ford believed that a positive college going culture was evolving in the school based on how much easier it was to entice new students to participate in the upcoming school year compared to recruiting his current group of students. He said:

The underclassmen are watching the seniors. They are watching them take the SAT or ACT, apply to colleges, worry about financial aid. These

behaviors are trickling down and students are wanting to begin their college going process earlier than in years past.

Burge also relied on voluntary participation to fill the available seats in her program. She said something similar to Ford. She said:

We don't have to bribe kids to go on college tours or sign up for the SAT. Kids now are clamoring to get on the list to go on a college tour. The school is also quickly running out of SAT and ACT fee waivers because so many students are signing up to take these tests.

Domain 5 Summary

The College Access Center had created an overall college going culture that seems to have lead to increased participation of the students. Students were beginning to explore their college going options earlier in their high school careers; thinking about college was not just for the senior class. As a result, the activities and best practices of knowledgeable advisers housed within the College Access Center provide students with many opportunities to develop social capital and complete college going activities that lead to college matriculation.

Domain 6: Financial Aid

In this domain, financial aid is defined as any monies to deter the costs of college tuition or other college related fees. Particularly for low-income students, the financial burden of funding a college education may appear to be fiscally impossible. It is extremely important to assist low-income students and families with financial aid options and processes beginning with the college application process and ending with actual

college matriculation. Domain 6 seeks to identify the processes advisers use to assist students with the financial aid process using the table below.

Table 6.

Domain 6: Financial Aid

Financial Aid Completion Indicators Evidence of: Students completing the FAFSA. Students receiving financial aid award letters. Students' understanding of financial aid. Students requesting financial aid assistance. Students completing supplementary scholarships applications. Has an accurate understanding of the FAFSA process and the steps needed to complete the application. Is able to explain in a clear and concise manner the importance of completing the FAFSA to parents and students. Provides students and parents with FAFSA and financial aid literature. Is aware of and knows how to access other forms of financial aid such as grants, scholarships, direct loans, and work study programs.	Domain 6: Financial Aid		
 □ Accurately and clearly explains a student's EFC and the grants and monies available to him or her. □ Accurately and clearly explains students' financial aid award letters and assists students in comparing offers. 	Financial Aid Completion Indicators Evidence of: Students completing the FAFSA. Students receiving financial aid award letters. Students' understanding of financial aid. Students requesting financial aid assistance.	 The College Adviser: ☐ Has an accurate understanding of the FAFSA process and the steps needed to complete the application. ☐ Is able to explain in a clear and concise manner the importance of completing the FAFSA to parents and students. ☐ Provides students and parents with FAFSA and financial aid literature. ☐ Is aware of and knows how to access other forms of financial aid such as grants, scholarships, direct loans, and work study programs. ☐ Accurately and clearly explains a student's EFC and the grants and monies available to him or her. ☐ Accurately and clearly explains students' financial aid award 	

The number of financial aid forms that need to be completed can be overwhelming for first generation college bound students and their families. The Free Application for Federal Student Aid (FAFSA) can be so complex, students are discouraged to attempt to complete it. This can be a huge deterrent to actually attending college. The complications of the system can demoralize students, and then they fail to complete the appropriate paper work.(Bloom, 2007; Burdman, 2005). In fact, the American Council on Education (2005) estimates that one in every five low-income students attending college fails to fill out a Free Application for Federal Student Aid even though they may be eligible for a Federal Pell Grant or a state grant (Baum, 2013). Ford explained further:

The college matriculation process is an expensive one and that is even before the bill for tuition, room, and board. A fee is tied to each step of the process. This can deter some of our low-income kids from applying. So we try to really emphasize the waiver program for students on free and reduced priced lunch and remind students to check in with the guidance department to see if they qualify.

SAT and ACT Financial Aid

Financial aid was available throughout the college matriculation process beginning with registration for the SAT or ACT. Students who qualified for free or reduced priced lunch were eligible for two SAT fee waivers that covered the \$52 fee and two ACT waivers that covered the \$36 fee. The students and families could save up to \$200 on the required college entrance exams by having knowledge of these waivers.

College Application Financial Aid

The next group of fees occurred during the college application process. Many colleges charge an application fee when a student applies. These fees can range from \$25 to \$90 depending on the school. College advisers were able to get many of these application fees waived using several strategies.

Till from Access Now explains:

The easiest application fee waivers to utilize are the College Board application fee waivers. When a student uses a fee waiver for the SAT or ACT, the student also gets four college applications fee waivers. We help the students navigate the College Board website to locate these waivers and then print them out to be included in their college application package.

If students were applying to multiple schools, the waivers could end up saving them a great deal of money.

In addition, Burge from Full Speed Ahead and Otte from The Next Step had formed very close professional relationships with many of the college admissions representatives. When a student did not qualify for a SAT or ACT waiver, however, paying the application fee would have caused a financial hardship, the college advisers were able to get the application fee waived. Otte said:

The relationships we have formed with college admissions representatives have become really valuable. We are able to explain the financial situation of most of our students and having the application fee waived has become an easy process. All we have to do is fill out a form for the student, and the fee is waived. At another school, I just email the

counselor and she waives the fee online. I think this year we have saved the students over \$17,000 in college application fees.

Having access to waivers for the SAT, ACT, and college applications, allowed many more students to take the entrance tests and apply to college than would have if they had to pay all the fees. College access advisers were able to obtain waivers and, therefore, more opportunities were created for students to take college entrance exams and apply to college, especially low-income and first generation college bound students.

Free Application for Federal Student Aid (FAFSA)

Once college entrance exam and college application fees had been waived and students were accepted, the adviser faced the largest financial aid hurdle, which was the completion of the FAFSA or the Free Application for Federal Student Aid. This crucial financial aid document, required by all colleges and technical schools, could hinder the college going process for many first generation and low- income college bound students and their families.

Ford from Pathways to Success explained that one of the biggest barriers he faced was convincing the parents that there was no monetary obligation to pay any college once they have completed the FAFSA. Much personal information was needed to complete the application including students' and parents' social security numbers and tax information such as their adjusted gross incomes. Parents needed to feel comfortable releasing this information to be able to complete the application.

Another barrier was the fact that the application must be completed online and many of the low-income students in the school did not have computers or internet access at home. The Center offered FAFSA completion sessions with a college adviser.

Sometimes parents were unable to get the necessary transportation or childcare to get to the school to complete the FAFSA. To navigate around this barrier, college access advisers began sending FAFSA worksheets home highlighting the necessary information the student would need from his or her parent or parents to complete the application.

Burge explained that many parents were happy to give their student their information and relieve them of the burden of completing this very daunting financial aid application.

While applying for financial aid may seem like an easy college going activity to complete once an adviser had parent permission and information, it could also be an extremely sensitive subject as well. The following interaction depicts such sensitive issues.

Till from Access Now and a student are going over the FAFSA worksheet that he needed the student's parent to fill out. The FAFSA is very specific when it comes to whose financial information needs to be reported. A student must use his or her parents' or adoptive parents' financial information unless they have another court appointed legal guardian. This can get complicated for students not living with their parents.

"Who do you live with?" Till asked the student.

"My grandma," replied the student.

"Is she your legal guardian, like through the courts?"

"No, I don't think so."

"Ok, where are your parents?" Till asked.

"My mom is dead and my dad's in jail," the student replied. She was more whispering the answer than speaking it, her head was down, and she was looking somewhat ashamed.

"I am sorry to hear that and I appreciate you feeling comfortable enough to tell me. But actually, this information actually makes your FAFSA application pretty easy." Till said.

"It does?" asked the student.

"Yeah. Your dad is not working, so all his income information will be zeros. All you have to do is ask your grandma for his social security number and we can get your FAFSA all finished up."

"Thank you," the student said breathing a big sigh of relief. "I'll bring that in tomorrow."

This type of situation occurs often. Many students were not living with their parents. Some were living with a legal guardian while other students were considered homeless. "You really never know the answer you are going to get when you ask a student about their living situation." Explained Ford

Financial Aid Documents

College advisers have learned that even when a FAFSA is completed, the financial aid process is still incomplete. "What am I supposed to do with this?" a student asked Otte handing her an envelope from a college. Otte opened the envelope and tried to explain the concept of Dependent Verification to the student. Otte explained that the student was selected for verification so she needed to take the form home and have her mom fill it out. "If you want to bring it back to me, we can go over it together and then mail it," Otte said. The student seemed very relieved by this explanation.

Low income students are often selected for verification, which means the university needs more information on the family's income. Otte explained:

Sometimes it seems like another roadblock for the student and his or her family. If you don't complete all the appropriate paper work in the verification process, you don't receive any financial aid. It can all be very confusing.

Even when students completed all the necessary paper work and received federal and state aid, very few students could attend college without applying for loans, especially low-income students. Loan advising, therefore, became another college adviser activity that fell under the umbrella of financial aid. Searching for financial aid could be difficult, and students often resisted the idea of taking out loans. Burge said:

I think the students hear us complaining about our student loans any they get scared of taking out a loan. I don't want to be in debt they say. I try to compare taking out a student loan with buying a house. I tell the students, you wouldn't not buy a house because you don't have the cash up front right, well college is the same way.

Domain 6 Summary

The financial aid process is complex and intimidating for students and their families. Through best practice, the college access advisers provide opportunities to help the families navigate the financial aid system that can assist the students and their families with the necessary funding for college matriculation.

Interview Data Analysis

This section will explain the findings from the grounded theory analysis of the interview data of five college access advisers. The findings are organized so that under each research question there are themes that occurred during the interviews. This first

section discusses the three themes that emerged when seeking the answer to the opportunities college advisers provided for their low-income and first generation students to matriculate into college. The second section contains the themes, which were found during the discussion of best practices.

The interview section of this study revealed three themes for opportunities created by college access advisers to assist their students to matriculate to college. First, the advisers spoke at length about the one-on-one college going counseling they provided for their students. Second, the advisers spoke about the importance of a specific space designated for college activities only. The third theme discussed by the advisers surrounded all of the social support for the students.

Role of College Access Advisers

Before these themes were analyzed, however, college advisers spoke with great passion about their positions and the students they served. This section was included because it adds context to the relationships formed between college advisers and their students that is revealed throughout the interviews.

The students who worked with the college advisers attended what is often described as a low achieving school. The school had made encore appearances on the state's Prior Learning Assessment list and was at risk for being taken over by the state. Some of the students and their families often met academic achievement and financial capabilities necessary to attend college with skepticism. Ford of Pathways to Success explained:

Most of the students I work with come from single parent homes. If there

are two parents, only one of them works. Most of the parents are coming from a background where they have graduated from high school but never even considered going to postsecondary education. We focus to make sure that our students have the ability to continue on to college because they don't have any one else in their life who has experienced that before so we try to be the voice for them so they don't have to do everything on their own.

Without prior experience, families are not familiar with the college going process.

Students need another source to help them navigate the process, which they cannot navigate on their own.

While Ford saw his role as the students' extra voice, Lewis from Leaders of Tomorrow saw herself as the "engager." She explained that she specifically worked with:

Individuals who have been a part of a dependency system, which means they were adjudicated independent or a ward of the court as well as the delinquency system which is juvenile probation. Most of them have little to no income. I have to engage these young adults to even begin to think about postsecondary education as an option.

Burge from Full Speed Ahead described herself almost as a cruise director, setting up workshops and specific college going activities, working with the guidance department, and providing one-on-one assistance when necessary. She explained her role:

I do study skills workshops, I do goal setting workshops, I do decision

making, anything that helps the students learn more about themselves. We start talking about career clusters and do activities related to that. I try to get them to come to the Select a College Night so they can learn more about it and have them participate in the college fair or panel discussions.

Till from Access Now saw himself in still an even different light, and described himself as a provider of what he likes to call "College Light:"As he explained:

I see myself as one who provides low-income first generation potential college students with a collegiate setting in a low risk environment. My students come to the university and spend six weeks with us taking academic classes. They're on a college campus, they live in the college residence hall, and they eat college food. They have mentors who are current college students to act as tutors and help them navigate some of their social issues. It is kind of like College Light in a way. We prepare them. We provide them with all these activities for them to help them be successful once they actually get to college. We try to focus on developing study skills, study habits, those kinds of things.

Otte from the Next Step, who saw the most students in the school and saw herself as the students' academic manager explained

I insist on checking GPAs consistently and increasing students self awareness of their grades. Helping students realize that in order to go to an exciting college one must have the right grades and take rigorous academic courses particularly in junior and senior years of high school.

It is interesting to note the diversity in the college access advisers' role descriptions.

Even though the advisers all have the same goals, helping low-income students matriculate into college, they all have their own methods of achieving these goals. The next section will discuss some of the different opportunities these college advisers create for their students to matriculate into college.

Opportunities Created for Low-Income and First Generation College Bound Students

One-On-One College Counseling

College advisers saw one of the most important opportunities they could provide their students with was one-on-one college counseling. These interactions allowed for the student and adviser to format a plan that was realistic but also provided the necessary assistance needed to complete the plan. Student felt comfortable enough with their adviser to articulate their true dreams of attending college. For example, Ford said:

There are a lot of students in this school that know they want to do something else. They know they want to go to school and they know they are going to need some help with it, and they don't really have any help at home so they sign up for the program. I see myself as an added voice for an option they thought wasn't available to them. They think attending college is an unreachable goal and most of the time it is not out of reach they just didn't realize they had the ability to get to college.

Otte felt the same way as Ford, but was more specific with how she enticed the students to share their postsecondary plans. She said:

At the beginning of the school year, I sit down with every single senior and we begin to set up a plan. Sometimes the student will have no idea what he or she wants to do after graduation, however, I always hope they are leaving the Center with the seed of college has been planted in their minds.

From the interview data, advisers were a little startled to realize that college was not the next logical step for many high school students. Ford said, "College may seem like the next logical step after graduation for us as professionals, but for low-income and first generation students, attending college may seem like a lofty goal." Burge agreed with Ford and said:

It's easy for me to say that the next step after high school is college. That should be step one or two of the plan not step seven. But for the students, the option of college, especially a four year college, seems so far away. Having these one-on-one conversation makes them realize that "Oh my God, I can achieve those goals.

The opportunity to have a conversation with a college access adviser had the ability to give students the personal confidence needed to begin thinking about and applying to college. Without the best practice of one-on-one counseling, the student may have never considered the possibility of attending college.

Much of the one-on-one counseling eventually lead to parent involvement and the college access adviser then provided the mostly low-income parents, who themselves had not gone to college, information pertaining to the financial aid process. The student may

express the desire to go to college, but parents may think that they cannot afford it. This is when one-on-one counseling turns into family counseling. Ford said:

The parents tell us, "Oh I don't know if we're going to be able to afford that?" Then I explain FAFSA, PHEAA, state aid, things along those lines and then parents start to get the picture.

Sometimes Ford felt like he had to play family psychologist because he had to try and quickly change the entire family's way of thinking and instill in parents that their son or daughter was smart enough to go to school and there was money available for them to go to school. Through a relationship with the adviser, a student had the support and opportunity to discuss the possible reality of attending college.

A Space for College Knowledge

The advisers believed that having a space in the high school designated for college going activities was important for two main reasons. First, it gave the students an opportunity to think about their futures outside of the traditional classroom. It gave them a space to work on their goals with the resources needed when they had questions. For example, Otte said:

It's a friendly space, and it's a comfortable atmosphere. It doesn't look like a classroom at all, and it's a place where they can come with friends. It's not really terribly structured, and students can come in and do some work and have a little bit of fun working on something that is going to help them in the future.

If they have questions, we are here to help.

The Center stayed open after school until five. If students could not stop in during the school day during a class or during lunch, they could stay after school to work on their college or scholarship applications or do homework.

Lewis believed the popularity of the space and the vigor with which the students used the space came from the affirmation and success the students experienced when they were working in the room. She said:

I think sometimes students just want to know they are on the right track.

They need their future plan affirmed by someone they trust and who knows what they are talking about. Sometimes just telling a student, they have a good plan in place eases their stress and builds up enough confidence in them that they actually begin to work their plan.

In addition to affirmation, the advisers' best practice of making every student visit to the Center a successful one made the Center a viable resource for future opportunities.

Otte explained:

We never want anyone to leave here disheartened or frustrated. We hope to be able to answer all the students' questions about higher education, but we obviously don't know everything. Instead of just giving the student an "I don't know" answer, the student and I get on the computer until the answer is found.

Till thought the Center created an environment where students could feel successful.

"It's a supportive environment, added Till. "I think that it gives students the confidence to come in and actually fill out an application when they otherwise would just think about filling out an application."

The college going culture of the school was fostered in the College Access

Center. The message was college and postsecondary education is important to this school and there must be place designated for college going activities. Otte explained further:

The students don't realize that we are a grant funded program and not just part of the school like the gifted program is. I think having this designated space makes the idea of going to college more real for the students. They see that the school has a space for the athletic department and the music department, which both play a big part in the culture of the school. If a department that can help you go to college gets its own space, then it must be important. That's what I think they are thinking.

Attending college was both important and popular amongst the students and, therefore, visiting the College Access Center was trendy.

Social Support

Although social support is not tangible and cannot truthfully be measured, it often times is a service ignored or not analyzed. An adviser cannot count or measure how many times he or she has provided social support to a student. However, this may be the most important service an adviser can offer a low-income first generation college bound student. In the interview with Burge, she said:

I think we provide students with expectations. We expect that they will have a plan before they graduate high school. We except that some form of postsecondary school is the next step after graduation. We do not expect them to graduate and continue to work at their part time minimum wage jobs. The more we expect from them, the more they can expect

from themselves. Postsecondary education just becomes the logical next step.

Till's interview contained a tremendous example of social support. He said:

You don't realize sometimes, what a simple conversation will do for someone. A student said to me 'you spent time with me today and you got to know me as a person; and you talked me through some of the things I was really nervous about. My mom does not do that for me and my family doesn't really talk to me about this stuff: and so I just want to do this. I want to be successful because I don't want to be like my mom who has two minimum wage jobs and I never see her.'

Lewis said:

Kids get more out of participating in our programs than just access to college and postsecondary school. They get the opportunity to form relationships with adults who have been to college and this may be difficult for them if they weren't participating in a college access program.

Summary of the 3 Themes

The three themes, one-on-one counseling, space, and social support were all opportunities for students to complete the actions necessary to matriculate to college.

The three themes proved to be necessary components of the college access programs that would eventually lead to college matriculation.

Best Practices of College Access Advisers that Most Often Lead to Student Matriculation into College or Other Post-Secondary Education

The interview portion of the study provided insight into the participant's thoughts on the best practices they used that lead to matriculation into college or post secondary school for their students. There were six categories of best practices that emerged from the data. These best practices began with simply getting students to think about the possibility of college and concluded with the very important practice of strong social support and trusting relationships that gave the students the confidence to actually matriculate into a college or university. The first practice to be explored was the difficult practice of convincing students that a college education, even though perhaps a new concept to his or her family, was the student's next step upon high school graduation. Advisers chose to do this by talking to the students about money and making money, a concept everyone understands.

A Conversation about Lifestyle

The advisers began the conversation with students about their vision of the future lifestyle they desired. All five of the participants spoke at length about the strategies they used to convince students that college was both a necessary and realistic next step.

Burge's strategy included an attention grabbing game that all students could relate to, even her younger ones:

When I am speaking to younger students, one of the things we do is we play a game called the Price is Right. I put six different careers on the board and I talk about education levels or training levels so we talk about the difference between on the job training and postsecondary and

vocational training. We talk about associates, bachelors, and masters degrees. We talk about what the careers are and then they have a good sense of what the person does. So one side of the board is the education training level and the other side of the board are the salaries and careers and the students have to decide which salary goes with which career.

What the student often found was that individuals who skipped college and did on the job training only, made the least amount of money. College graduates made significantly more money.

Similarly, Sharde also talked about careers, salaries, and levels of education. She said:

We talk about the difference between working at Sheetz, for minimum wage. Then we pick maybe a college degree that doesn't require a lot of years like maybe a LPN because they're like 18 months to two years out of high school, but it still follows a pretty rigorous program. We then talk about the amount of money those individuals make. So \$7.25 an hour compared to \$18 an hour. Then we pick a bachelorette degree like software engineering after four years of college and you may be making \$80 an hour. Then we talk about things like this is how much a one bedroom apartment costs, and this is how much your gas bill may be and then there is your electric bill and cable bill and are you going to have a car, etc.

Through this whole process, the students could see how much money they would have left over at the end of the month if they were working at Sheetz for minimum wage compared to if they were working as an LPN or if they had a four year degree.

Both Burge and Lewis found that using money as a motivator helped spark the initial interest in a college education. "That is the only concrete way to get kids to think about college as an acceptable option because without money, you can't live and have all the things you think you would like to have," Burge said.

Other college advisers had conversations with their students about the differences between a job and a career. Ford was able to do this with his students since many of his students already had part time jobs. He said:

It is great for them to get the work experience, but its great for them too because I can explain to them those are jobs and not careers. It is something very easy to get but you can't sustain yourself on it for long periods of time and then showing them the cost of living and showing them how much it costs to live on your own.

Students were unaware of the opportunities a college education could provide. Many realized they would need a college education to support their desired lifestyle.

Like Lewis, Ford also had the students plan out what type of lifestyle they intended to live in order to convince the students that college was a necessary post high school option. Ford said:

We worked through a big checklist of things the students want to have in the next five years. Do you want to own a car? We look up how much that car they want costs and then go look up the average interest rate on a loan, etc. We look up all the different things they may end up paying for per month and force them to ask themselves how are they going to afford all of the these things in the next five years if they are only working for minimum wage.

The goal of attending college seemed to create a vision for a different lifestyle and the knowledge that postsecondary education would be necessary for that reality.

Academic Programming

Once a student realizes their aspirations to attend college, they understand the importance of academic success. Academic programming was offered by all five college access programs.

Summer program.

Another best practice was the summer college experience offered by Till's program which included a research component which Ryan described as having the biggest impact on the students. The goal of the summer program was to provide enrichment courses to the participating students. Till explained in detail below:

Students have the option to either go ahead and take the next level course they plan to take in the next school year following the summer program or they can chose to remediate and stay back, if you will, and retake a course they already took during the academic school year they just finished so they can feel more comfortable with the material.

In addition to taking these courses, students also had the opportunity to work with State College faculty on original lab research. "It's an experience where the students collect the data, analyze it, and prepare it for a presentation at the end of the summer," explained

Till. The students presented to their fellow peers and State College faculty and there was certain criteria that they were judged on.

After school peer-tutoring.

Another academic best practice was an after-school peer-tutoring component run by the Next Step program. The program used students who had successfully completed course work during their freshman, sophomore, and junior year and these students tutored their younger peers who were struggling in certain subjects. "The kids respond well to their peer tutors, sometimes better than they respond to a teacher," Otte said. She also talked about how the peer tutoring program had affected the overall culture of the school. She when on to say further:

It (tutoring) helps set the culture of looking for help when needed in academics. It helps give good academic performance a place of importance throughout the school. The better the academic performance the better the GPA and the more college options you have. It's really hard to develop that culture. Getting the point across to the students that academic work is important has been a really slow process.

Exposure to College Going Activities

Job shadowing.

With the right academic success, the opportunities for job shadowing and college tours are the next step in college matriculation. The Pathways to Success offered a unique job shadowing experience. Ford believed that this part of his program had the "biggest impact" on the students and the earlier in the academic year students completed a job shadowing the better. "Seniors or high school students in general are constantly

changing their minds about what they want to do," he said. The job shadow experience helped students figure out if the career they were considering was right for them. Ford said:

The job shadow experience either affirms the passion a student has for a career or the student realizes that the career is not something for them or it's not all cracked up to what it was supposed to be and then they are like, ok, back to the drawing board. So regardless of the outcome of the shadowing whether they do or they don't enjoy the experience they can at least learn from it and learn something about themselves.

College tours.

The practice of taking students on college tours was mentioned frequently throughout the interviews and all five programs mentioned the importance of these visits. The tours always drew a high number of participants. They were something the students really looked forward to and the students were constantly asking when and where the next trip was going to be. Burge said:

A lot of them (students) get excited. When we went to Wilkins State

University for the first time, they could not believe how big the campus
was and the people were so friendly. They are interested and the whole
idea of college, seeing it up close and personal and talking to people that
are there like former alumni of their school. I think it helps them think 'I
could do that. I could see myself doing that'.

This firsthand experience seemed very important. Lewis explained:

It's nearly impossible to convince someone to invest a huge amount of money into a place they have never seen before. I mean, you would never by a house without looking at it first! It is so important for a student to understand that high school and college are very different and being on a college campus allows for the students to experience a glimpse of the college lifestyle.

Sometimes the tour convinced a student that he or she should attend college.

Till also spoke about the importance of exposure to college campuses. He said:

We give our students the type of exposure where students can start thinking, Hey this is the kind of college experience I want, or hey, I can actually do college. I know with some college visits that we do, students don't even consider college as an option until they actually go and see what one is like.

The advisers felt that it was important to take the students out of the high school and environment and place them on a college campus so they could visualize the possibilities of college. This best practice was particularly effective with low-income students who rarely traveled out of their neighborhood.

One-On-One College Counseling

The advisers spent the majority of their time engaged in the best practice of counseling their students one-on-one. It was during these sessions that students could verbalize their plan. Burge spoke about meeting with her students individually:

I like meeting one on one with the students because I think you can

accomplish a lot more than you do in groups. With the one on one interaction, the students tend to respond in a way that they don't When they are in a group. I feel like these conversations give students the opportunity to learn about themselves.

Ford agreed with Burge that a lot could be accomplished in the one-on-one sessions. He said:

Being able to work with the students one on one gives you a better idea of how that student is when they are away from their friends with their family or even away from their family. Sitting down and being able to talk to them one on one, you get a better idea of what their abilities are, what they can do, where they don't have to worry about what everyone else is going to think.

College search.

All five of the college access programs assisted students very closely throughout the entire college matriculation process beginning with the college search as early as freshman year. "It's a big decision," commented Lewis. "You can't pick a school because you like their school colors of they have a good football team," she joked. Exploring colleges and deciding where to apply is paramount to the college going process; Ford added:

After a student has decided on a career field, we have to research the kind of institution of higher learning that he or she will have to attend. Most of the tine the career requires a four-year degree so we start researching colleges. So we start looking, ok, what kind of college offers that type of

major, what are the test scores and GPA requirements to be admitted, how much does it cost? This then leads into the actual application process.

What may seem like a simple act by the college adviser was a crucial step in the college enrollment process and that was having the student actually complete the application with the adviser.

Completing college applications.

Many students were extremely intimidated by the college application process and often procrastinated not wanting to begin something they had never done before. Burge believed that one of the most important things she did was to sit down with a student at the computer and have them fill out a college application for the first time. Burge recalled:

After their application is complete, they realize that applying is not a scary thing and it is not going to take a long time and once they do one application, sometimes that is just all that is needed to push them to apply other places. Therefore, sitting down with a student and assisting them step by step through the first application, gave students the necessary confidence to apply to many colleges.

The best practice of one-on-one counseling was the foundation for building accepted social support and relationships with the students.

Financial aid assistance

The cost of college can sometimes be paralyzing for low-income college bound students and their families. Each of these advisers spoke about educating first generation students and families about all the financial aid that would be available to them in order

to bring down the huge cost of college. Ford found one of the most important practices of his program was reaching out to parents and exposing them to federal and state grants, and scholarships. He helped parents realize that college was a huge expense but the total cost could be brought down by financial aid and other resources available to them.

The financial aid process could be very intimidating. Since most of the students at the school were low-income, they qualified for a great deal of federal and state aid. However, the processes necessary to obtain the funding could be extremely confusing particularly for first generation college bound students and their families. All five of the college access advisers made themselves available for students and their parents to have the opportunity to receive assistance completing the first step of the financial aid process, the Free Application for Federal Student Aid (FAFSA). The FAFSA required parent information including social security numbers and gross income. Burge explained that the parent must be in agreement with the students for students to be able to complete this step in the college matriculation process.

Otte thought that it was important to discuss loans and money beginning as early as freshman year with her students. She said:

I talk about borrowing money and how it is a fact of life and how you have to borrow money if you want to get an education and you have to borrow wisely. You want to borrow for a career that you are pretty sure you can get a job in. You want to borrow to pay for a school that is not outrageously priced and you borrow with faith that you are going to have a job to pay off that loan.

Ford also discussed loans with his students. He stated:

Once everyone starts getting their acceptance letters, the students get really excited. Then they are like now what do I do. How do I pay for this? It is important for them to know what a loan is and where they can find a credible loan source.

When the students and parents understand the student loan process, the fear of borrowing money for education assuaged.

Social Supports and Relationship Building

Of the six best practices, social supports and relationship building were the only non-tangible best practices but are fundamental for the social capital they provided. Otte said:

Convincing a student to do something that his or her family members have never done before takes a tremendous amount of trust between the adviser and the student. The student has to believe that you have his or her best interest in mind and many times these same students have been cheated by the system in the past making it difficult for them to form trusting relationships.

Till explained further:

Some groups of society have already written off our kids. The students have already given up on their futures and their options are to work for minimum wage at a dead end job. Some unfortunately some chose a life of crime instead of a job or education. This becomes a drain on our society. But these students could still be helped and given hope about their futures.

Once a student realized that a college adviser was invested in his or her future and the adviser was going to help them as much as possible, a trusting relationship seemed to begin to form. Otte explained:

I individually meet with every senior and then every junior and it's not just one time, there is lots of follow up with the students. Therefore, students begin to trust and are willing to follow the directions of somebody to build on their futures.

These relationships seemed to be what fueled all other college going activities.

Till explained:

When you think about a low-income under represented first generation student, a lot of the time, they don't have a support system. They don't have anybody in their family that's been to college. They don't have a lot of money to pay to go and they don't have someone they can talk to about it or answer questions like how do I make this happen, how do I make this work. So I think those relationships are so important.

The college advisers were also invested in growing the students' sense of self-efficacy, and through conversations, they were able to bolster the students' self-esteem. Burge said she felt that her program gave students hope and helped them to feel like they could accomplish a college degree. The students knew the advisers were invested in them and that may have caused them to complete college going tasks when they otherwise may not have.

The relationships formed between student and adviser sometimes morphed into a familial relationship for the students: Burges explained:

Sometimes I do feel like their parents. Everything I am doing for them is what my own parents did for me when I was applying to schools. The students even tease you sometime and call you "mom." The best thing about these close relationships is when a student comes running into the Center waiving his or her acceptance letter and yelling I got in! I got in! Sometimes they tell us before they tell their parents. That's when we put them on the phone and call their parents at work to share the good news.

Despite the presence of the other five best practices, the relationships formed between adviser and student and the social supports provided were what fueled the entire college going process.

Interview Data Summary

The research literature is lacking when it comes to identifying the best practices that lead to college matriculation for low-income and first generation college bound students. The interviews with the five college access advisers uncovered what they believed to be the best practices that lead their students to college matriculation.

Teacher Survey Data Analysis

To address the research question of

"What evidence exists to document positive college going attitudes for students and teachers in a school with college access programs?"

Teachers and other faculty members working within the participating school completed a survey. Total survey participants amounted to 91. Of the participants, 88 were teachers, two were coaches, and one was an administrator. The survey can be found in Appendix C. The survey contained 17 items, most questions pertained to the college going culture

of the school, and the remainder were demographic questions about length of teaching career and subject taught.

- 1-5 were demographic questions,
- 6 and 8-11 were multiple choice questions,
- 7 was a ranking question
- 12-17 where Lickert scale questions: agree, strongly agree, disagree, and strongly disagree.

Teacher Survey Analysis

Items 8 through 17 received a score between one and four, with four demonstrating the strongest evidence of positive college going attitudes. Individual scores ranged from four to 40 on the overall scale and four-12 and four to 28 on each of the two subscales. Higher scores represented stronger evidence of a positive college going culture. The minimum, maximum, and mean scores for the 91 participants on the overall scale and the two subscales are reported in Table 7.

Table 7

Descriptive Statistics on Teacher Survey Scores

	Min	Max	Mean
Teacher Survey Subscale Scores (4-12)			
Student Attitudes	4.00	11.00	8.14
Teacher Survey Subscale Scores (4-28)			
Teacher Attitudes	13.00	28.00	18.73
Teacher Survey Overall Score (4-40)			
Student and Teacher Attitudes	19.00	37.00	27.04

Note. N=91.

Student Behaviors Analysis

Table 8 provides the mean, minimum, and maximum scores of the 91 participants on each of the three items pertaining to the students' behaviors and attitudes about college. Data analysis in SPSS found that only one (1.1%) of the 91 participants responded that few of the high school's students believed going to college was attainable. None of the participants believed that all students thought that college was attainable. Of the participants, 59 (64.8%) believed that most students thought college was attainable and 31 (34.1%) believed that some students thought college was attainable. Question 10 resulted in the highest mean (M = 2.78) followed by Question 11 (M = 2.70) and then Question 8 (M = 2.64). Scores closer to four reflected a stronger college going culture in the participating school. Evidence of a positive college going culture can be found in Question 11 pertaining to participants' responses to their students' participation in

college going activities. Only four (4.4%) indicated that their students never participate in college going activities while 50 (54.9%) indicated that their students sometimes participated in college going activities. However, 28 (30.8%) reported that their students rarely participated in college going activities and only nine (9.9%) reported that their students always participate in college going activities. These numbers may indicate that the positive college going culture of the school does not include the entire student body. Table 8

Descriptive Statistics on Teacher Survey Student Behaviors Subscale Items

Items	Min	Max	Mean
8. Students' belief that college is attainable	1.00	3.00	2.64
10. Student discussions about the SAT/ACT	1.00	4.00	2.78
11. Student participating in college going activities	1.00	4.00	2.70

Note. N=91.

Teacher Behavior Analysis

Table 9 illustrates descriptive statistics for questions related to teacher attitudes and behaviors pertaining to a positive college going culture. Higher scores represent a stronger sense of a positive college going culture within the school, with the value of four as the highest possible score. Items 15 and 16 reported the strongest teacher attitudes towards a college going culture. Only one (1.1%) of the 91 participants indicated that they did not know who to speak with when they had a college related question but 51 (56%) indicated they knew exactly where to go with their college related questions.

Responses to item 15 indicated the teachers' beliefs that students should see their

education as an investment and not be afraid to take out student loans. Of the participants, 57 (62.6%) disagreed with not taking out loans for college while only five (5.5%) agreed. Furthermore, the teachers in the participating school believed that their colleagues felt that college was attainable for their students (M = 2.79). Of the participants, 52 (57.1%) believed that most teachers felt that college was attainable for their students. For Item 14 (M = 2.67), many of the participants felt strongly about their students attending a four year college rather than beginning their education at a community college. Of the participants, 57 (62%) disagreed that students should begin their college education at a community college.

Despite such strong evidence of a college going culture, the participants believed that college access programs could be providing more services to their students. For Item 12 (M=2.18), 66 (72.5%) of the participants agreed or strongly agreed that college access programs in their school could provide more services to their students. Findings from Item 17 (M=2.18) also indicated the desire for a stronger college going culture. Fifty-eight (63.7%) of the participants marked agree, signifying their desire for more information about the services provided by the college access programs.

Table 9

Descriptive Statistics on Teacher Survey Teacher Behaviors Subscale Items

Items	Min	Max	Mean
9. Teachers' belief that students can be accepted to college	1.00	4.00	2.79
12. Teachers' feelings toward college access programs	1.00	4.00	2.18
13. Teachers' knowledge of state college requirements	1.00	4.00	2.52
14. Teachers' belief in beginning at community college	1.00	4.00	2.67
15. Teachers' belief in taking out loans for college	1.00	4.00	3.05
16. Teachers' knowledge of college resources	1.00	4.00	3.50
17. Teachers' desire to learn more about college access programs	1.00	4.00	2.18
N . N 01			

Note. N=91.

Survey Data Summary

The data suggests that although college access advisers have done a great deal to change the college going culture in the school, teachers still believed that more can be done for their students. Survey questions pertaining to student participation in college going activities scored highest in the rarely or sometimes categories indicating that positive college going behaviors were not present amongst the entire student body. As a group, teachers believed, however, more college related activities and opportunities could be provided to the student body.

Chapter 4 Summary

Chapter 4 presented the findings of this study divided into three main sections.

The first section relied on the data collected by the College Access Tool of Evaluation

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(CATE). The five domains of the CATE were used to organize the data. The 24 observations provided a very detailed look at the nature of college access programs and their advisers. The second section presented the results of the interview data. Much of the interview data supported the findings of the CATE. The chapter concluded with descriptive statistics for the Teacher Survey that revealed evidence of a more positive college going culture. In the following and final chapter, the findings of the CATE, interviews, and survey will be synthesized in relationship to the three research questions. Implications for schools and college access programs and recommendations for further research are both discussed.

CHAPTER 5

DISCUSSION, IMPLICATIONS, RECOMMENDATIONS

A college education is often a missed opportunity for low-income and first generation college bound students but, is necessary to climb the economic ladder or remain part of the middle class. Chapter 2 discussed the multiple barriers faced by high school students on their quest for higher education. Unequal academic resources place low-income students on a very uneven playing field. Students and their families may believe that college is not an option after high school graduation. Chapter 2 ended with an introduction to college access programs and the important role they can play in assisting low-income and first generation students navigate the college going process. The practices and components of college access programs and their college advisers, however, is often absent from the literature (McKillip, Godfrey, & Rawls, 2012). More specifically, questions about how college access programs provide students with the social supports to make their dream of college attendance a reality often go unanswered, and the focus remains on outcomes instead of processes. Furthermore, social supports for first generation and low-income college bound students may lead to the necessary social capital required for a successful high school to college transition (Ascher & Maguire, 2007; Engberg & Wolniak, 2010; Farmer-Hinton, 2008; Farmer-Hinton & McCullough, 2008; Hill, 2008).

Using the case study method to research, this study has attempted to uncover the components and practices that lead to individual low-income and first generation students matriculating to post-secondary school. The study explores further, how these

components and practices affect the culture of the student body. Data for this study were collected using the mixed methods approach.

Within the quantitative phase, a researcher-developed survey was used to obtain the teachers' perspectives on the school's inclusive college going culture. The survey was administered during a full staff meeting at the beginning of the study. Of the 104 teachers in the building, 91 teachers chose to participate in the survey. The purpose of the survey was to determine if the school's five college access programs had any overall impact on the school's college going culture through the perspective of a teacher. The data from the survey was analyzed using SPSS and descriptive statistics were used to highlight the findings.

The majority of the findings were qualitative in nature and described in extensive detail in Chapter 4. Data analysis included the close reading and coding of phenomena observed using the researcher-developed College Access Tool of Evaluation (CATE). Over a period of eighteen weeks, 24 observations of forty minutes each were collected. To strengthen the findings of the CATE, a transcribed interview was conducted with each of the program advisers. Refer to Chapter 4 for excerpts from the interviews. All qualitative data were approached from the grounded theory perspective.

Chapter Five attempts to bring to light the most important opportunities and components used by the college access advisers in the context of their college access programs in relationship to the following research questions:

- 1. To what extent, if any, are college access programs effective in creating opportunities for low-income and first generation college bound students to matriculate to college?
- 2. What best practices do college access advisors use to help low-income and first generation college bound students decide that postsecondary education is attainable?
- 3. What evidence, if any, exists to document positive college going attitudes for students and teachers in a school with college access programs?

In this final chapter, following a brief summary of the findings organized by research question, there will be a discussion of the synthesis of the research findings and their implications. Next, there will be a discussion on the limitations of the study. The chapter will conclude with a section on recommendations for further research and then the chapter summary.

Summary of the Findings

In the qualitative phase of data analysis, the researcher-developed CATE and the interview protocol generated similar findings. The CATE was designed with six separate domains that account for all the professional responsibilities, activities, and student interactions required of a college access adviser. Of the six, only Domain 3: Professional Activities and Responsibilities was eliminated. The remaining five domains were chosen for this study including:

- Domain 1 College Going Activities and Admissions
- Domain 2 Trust, Self-Efficacy, and Relationships

- Domain 4 Academics & Testing
- Domain 5 Building a College Going Culture
- Domain 6 Financial Aid

Interviews with the five college access advisers substantiated the findings of the CATE.

The third research question will be answered in a quantitative format using data from the teacher survey.

Summary of Findings Related to the First Research Question

To what extent, if any, are college access programs effective in creating opportunities for low income and first generation college bound students to matriculate to college?

Matriculation into college requires some degree of social capital. One must know the complex multi-step procedures of the college application and financial aid process. A college access adviser possesses this knowledge but must develop relationships with low-income and first generation college bound students in order to disseminate this information. To advance the discussion of the creating opportunities research question, the three major themes were identified as one-on-one college counseling, space, and social supports using data from both the CATE and the five college access adviser interviews.

One-on-One College Counseling

It is clear from the data that the college access advisers found the one-on-one counseling time with their students to be invaluable in the college going process. An adviser, for example, said that the conversations gave students the opportunity to learn

about themselves. The advisers also noted that students tended to respond differently to questions when they were with their friends or family compared to when they were working one-on-one with an adviser. Of the 24 CATE observations, 18 of them were of advisers working one-on-one with students. Creating a post-secondary plan, filling out college applications, and completing financial aid requirements were the three college going activities where one-on-one counseling was used the most. It would seem then that advisers spent much of their time making themselves available for individual student communication. The one-on-one opportunity to discuss post-secondary goals with a college access adviser appeared paramount in low-income and first generation students matriculating into college.

Space for College Knowledge

Using the CATE, the importance of physical space was discovered. The college access advisers all worked out of the College Access Center. Meeting a student in the Center gave that student an uninterrupted opportunity to think about his or her future outside of the traditional classroom. Within this space, a student could obtain the necessary college knowledge needed to complete college activities such as choosing a school, applying to a school, or completing financial aid documents. In addition to the physical resources, the students had access to social networks created by the college access advisers that added to the students' social capital. It seemed that the space could surround students in a college going culture with the expectation that everyone needed and deserved a post-secondary plan.

Social Supports

College access advisers were disseminators of general college information, or what they called "college knowledge." They attempted to build a strong social network around the students by also sharing this college knowledge with their families. However, it was clear in the CATE and interview data that these social supports were superseded by the supportive relationships that were formed between students and advisers. With these relationships, students had the opportunity to be mentored and usually this mentorship exceeded the scope of college knowledge. The college advisers expected much out of the students, maybe more than any other adult ever had. Through these relationships, the adviser could build a student's self-confidence enough to make them believe that college truly was the next logical step in their life.

Summary of Findings Related to the Second Research Question

What best practices do college access advisers use to help low-income and first generation college bound students decide that postsecondary education is attainable?

The CATE was designed to collect the qualitative data often overlooked when deciding on a program's effectiveness. This perspective of data collection directs the researcher to see behavior in context and does not focus on outcomes to the exclusion of processes (Bogdan & Biklen, 2006). With the focus of program evaluation often on outcomes, the CATE was used to collect data along with data from the interviews that highlighted all of the services necessary to produce those outcomes.

Six best practices were identified. Each practice is summarized below.

Lifestyle Discussion

College Access Advisers began to expose students to the idea of college beginning freshman year. The advisers all had similar approaches with the emphasis being on the lifestyle students expected to lead after high school. The concept of "the more you learn, the more you earn" was stressed. One of the advisers played a game with her students where the goal was to match the salary with the profession and the required level of education. Another adviser had his students figure out how much money they would need a month to be able to own a house, a car, and pay all their bills. He wanted to stress the major difference between having a job versus having a career. All the advisers felt it was important to link the concepts of money and lifestyle to the importance of furthering one's education.

Academic Programming

College Access Advisers spoke of three different academic support efforts that seemed to be most beneficial to the students. The first was Till's six week summer program that exposed students to life on a college campus and allowed them to take classes that strengthened their skills in math and science. Students were also given the opportunity to conduct original research with university faculty. The second academic support program was Otte's after school peer tutoring program where stronger students volunteered their time to assist students who needed extra help in specific subjects. The third academic support effort was the emphasis and assistance the college academic advisers placed on registering and practicing for the SAT and ACT college entrance exams.

College Tours

College Access Advisers frequently mentioned the importance of the college tours. They believed that taking students to actual college campuses and allowing them to experience what it may be like to be a college student was an extremely valuable element of their programming. Advisers thought that this experience could sometimes entice a student to begin to think about attending a four-year college when he or she may otherwise not have been considering it an option.

One-on-One College Counseling

All of the college access advisers believed that their abilities and opportunities to spend time one-on-one with a student was an important component of setting up a successful post-secondary plan. Through the one-on-one counseling, the adviser could really get to know the student and gain a sense of the student's abilities and realities to come up with a plan that best fit the student's needs. The opportunity to spend one-on-one time with a student allowed the adviser and student to build a trusting relationship that led to the student often being more open to the adviser's thoughts and suggestions when they did not quite match their own. Several of the advisers felt that spending one-on-one time with their students was the most important component of their job and they emphasized that sometimes theses students just needed someone to listen to them articulate their plan before it could become a reality.

Financial Aid Assistance

The College Access Advisers thought that one of their most important functions was to educate students and parents about all of the financial aid available to help with the cost of college. They spoke about the importance of reaching out to parents and

assisting them with the Free Application for Federal Student Aid (FAFSA). Several of the advisers spoke about the importance of discussing the cost of college and the option to take out loans with younger students so that families could begin saving for college tuition earlier than senior year.

Social Supports

Most of the advisers believed that providing social support to the students throughout the college going process was another important function. They reported that just letting students know that the option of college was available to them could have the ability to change the course of a low-income or first generation student's life after high school. One of the advisers said she felt like her program brought hope to students who otherwise may feel hopeless about their futures.

Summary of Findings Related to the Third Research Question

What evidence, if any, exists to document positive college going attitudes for students and teachers in a school with college access programs?

A survey containing 17 items was administered to the participating school's faculty. Items 8 – 17 (students and teachers attitudes towards college) received a score between 1 and 4 with four demonstrating the strongest evidence of a college going culture. Using descriptive statistical analysis, the faculty's responses to the questions showed a minimum score of 19.00, a maximum score of 37.00 and a mean score of 27.04. These scores affirm that the faculty at the participating school perceived the school to have a positive college going culture.

Discussion of the Findings

This study asked college access program advisers to identify the opportunities and best practices they could offer low-income and first generation college bound students as well as how these opportunities and practices effected the overall culture of the school.

Much of what was found remains consistent with the literature review on this topic.

Arguably, attending college has become the most important determinant of a middle-class lifestyle in the United States. It appears that one's level of education is the largest explanation of wage differences, continuous employment, and sustainable employment amongst individuals (Baum, Ma, & Payea, 2013; Cook & Cordova, 2006; Hotchkiss & Shiferaw, 2010). However, the National Student Clearinghouse reported that 70 percent of high-income high school graduates enrolled into college immediately following graduation compared to 50 percent of low-income high school graduates (2013). Such statistics demonstrate the difficulty of changing one's social status and achieving the American Dream. Chapter Two discussed the wide variety of college access programs already in place to assist low-income and first generation students make the transition from high school to college. Yet, a consensus on best practices is still lacking in the literature. This study has sought to highlight the best practices and specific program components that assist students transitioning into college or postsecondary school from the perspective of college access program advisers. Tierney & Venegas (2009) suggest that such knowledge could greatly dissipate the disparities in college enrollment based on socioeconomic status, race, and ethnicity.

One-on-One College Counseling

College access advisers in this study communicated the importance of spending one-on-one time cultivating an effective post-secondary plan with students. This finding resonates with the results of Lautz, Hawkins, and Perez (2013) who found that even spending ten percent more time on postsecondary planning showed a four percent increase in students attending a four-year college immediately following high school graduation. Rochford, O'Neill, Gelb, & Ross, (2011) also reported that the quantity and quality of counseling the college access advisers could provide often positively affected the number of students attending postsecondary schools. It seemed that the majority of the advisers' work was spent working one-on-one with students creating their plan for after high school, completing college applications, or completing the FAFSA. This one-on-one time seemed invaluable to entice students to begin the college going process.

Social Supports

College access advisers spoke about the importance of social supports for students who were first in their family to attend college or for students that lacked the social capital that affected their desire to matriculate to college. Farmer-Hinton, (2008) explains social capital as it relates to college access to include parent involvement in schools, peer influences, both positive and negative, and college awareness and networks. The college access advisers in this study often saw themselves as the disseminators of social capital and social supports and tried to strengthen the students' social networks. Bell, Rowan-Kenyon, & Perna (2009) argue that students with limited access to strong social networks and individuals with limited social capital have minimal postsecondary options compared to peers who, through strong college going social networks, are

exposed to a variety of college going options. Providing students with both tangible and conceptual resources and college going knowledge were reported in this study as major social supports that college access advisers could provide their students. College access advisers tried to institutionalize the social capital required for transitioning into a college or university. Advisers seemed to agree with Farmer-Hinton (2008) who stated that social support services were just as important as academic support services.

Trust

Results also supported Schneider & Bryk's (2004) emphasis on the importance of social trust and trust in schools. All five of the advisers agreed that trust between themselves and their students usually was established before the student would engage in college going activities. These findings support the literature that suggests school improvement and advancing student learning and achievement can be strongly associated with the amount of relational trust among the adults and students within a school. Consequently, trust is essential when it comes to counseling students to embark on a postsecondary journey that often no one in their family has ever attempted. Individuals who trust often can allow themselves to open up, adapt to new social environments, and experience new opportunities.

The college access advisers demonstrated behaviors that assisted them to form trusting relationships with their students, which include:

- Personal Language
- Competency
- Persistence

Compassion

Advisers were able to earn the students' trust, which allowed them to encourage and convince their students that attending college was a worthwhile investment and that they were capable of being successful at the postsecondary level. Convincing students that college could be their next step was not always easy because of the barriers the students faced.

Barriers

Haveman and Smeeding (2006) found that students residing in poor and minority neighborhoods, particularly in urban areas:

- 1. Are less well prepared academically.
- 2. Perform poorly on college entrance and readiness exams.
- 3. Are ill prepared to select colleges, apply for admissions, and secure acceptances.
- 4. Are poorly informed about the cost of attending college and the availability of need based financial aid.

The participating school in this study was indeed an urban school and many of the students demonstrated characteristics similar to the ones listed above. The college access advisers in this study had strategies and practices to address each potential barrier.

Academic Strategies Addressing Barriers

To address the academic barriers students faced when attempting to gain acceptance into college, college access advisers implemented several academic support strategies. Peer tutoring, a six-week summer enrichment program, and college entrance exam assistance where the three most effective academic supports. The peer-tutoring

program took place every day after school in the high school library. Through the observations, it was found that the students reacted much more positively to receiving help from a peer compared to assistance from a teacher.

The six-week summer enrichment program provided a small group of students the opportunity to take classes that were designed to strengthen their skills for the upcoming school year. Along with the experience of living on a college campus, students returned home with a new sense of self-confidence.

Studies conducted by the ACT show that students with higher socioeconomic statuses scored consistently higher on college readiness tests than students from economically disadvantaged families (2010). College access advisers attempted to assist students in overcoming the college entrance test barrier in multiple ways. In addition to assisting students with the actual registration process, which at times can be confusing, they also provided students with free resources to help them prepare for these tests. The free resources, for which students would otherwise have to pay, were helpful and allowed students to prepare for the tests on their own.

Goodfrey and Rawls (2013) found that providing college informational resources, personal support services, and college advisement as students navigated the complex college search and application process increased the number of students attending four-year colleges and universities. College access advisers in this study implemented similar strategies to overcome low-income and first generation students' struggles to select colleges, apply to colleges, and secure acceptances at colleges. Low-income and first generation students disproportionately begin their postsecondary education at a community college or other two-year program institution when they attempt to select

colleges on their own. (Goldrick-Rab, Pfeffer, & Fabian, 2009). College access advisers in this study spent considerable one-on-one time with students coaching them through the college selection and application process. The advisers attempted to steer the students to an institution that was academically and financially appropriate for them. The advisers also helped students select which college to attend when the student had been accepted to multiple schools.

All of the college access advisers in this study believed that assisting students in navigating the extremely complex system of financial aid was one of their most important practices. Research shows that the complexity is often an overwhelming barrier for families and discourages students who could otherwise succeed in college (Archibald & Feldman, 2011). Advisers made sure to assist students and parents systematically throughout the process.

One of the advisers felt that one of the most important things he could do for his students was to convince the student's parents to complete the Free Application for Federal Student Aid (FAFSA). Another adviser felt that her most important contribution to the financial aid process was assistance navigating and interpreting all the necessary paper work that comes after the completion of the FAFSA. Many other forms had to be completed including dependent verification paperwork and federal Stafford loans, which most students attending four-year colleges needed to complete. The college adviser must assist low income and first generation families with the complex financial aid process as these families are faced with decisions and actions that are completely unfamiliar to them (St. John, 2003).

Expectations

Roderick, Coca & Nagaoka (2011) reiterate that knowledge and participation in the financial aid process along with high expectations and strong support for college attendance are behaviors that are more likely to lead to matriculation into a four-year college or university. College access advisers emphasized the importance of having high expectations particularly for students whose families or friends had never attended college. This study found that the expectation that students would attend college began inside the College Access Center. Advisers believed that the culture of going to college emanated from the Center. When students entered the room, the expectation that they would be attending college the fall after high school graduation was a clear message. The fact that the school had designated a particular space within the building for college going activities also indicated high expectations for college attendance for all students. Advisers believed that the Center provided a safe space for students to think about and to plan their futures with the help of someone who possessed valuable college knowledge. This finding resonates with Welkin's (2013) argument that physical space and emotional space are factors in the creation of a sense of trust and safety. Trust and safety are needed to create a college going culture.

Summary of Best Practices

In summary, this study identified the specific best practices conducted by college access advisers to assist low-income and first generation students matriculate into college. The best practices identified were:

Lifestyle discussion

- Academic programming
- College tours
- One-on-One counseling
- Financial aid assistance
- Social supports

These findings are supported by Corwin, Colyar, and Tierney's (2005) five competency areas for supporting college readiness which include

- (1) Academic preparation,
- (2) Access to college planning information and navigational strategies,
- (3) Development of self-efficacy and college-going aspirations,
- (4) Strategies of socialization and acculturation,
- (5) Financial aid and financial planning skills.

Implications for College Access Programs

The findings of this study which bring to light the necessary components and best practices that support low-income and first generation college bound students provide insight into what is beneficial for current college access programs and schools wishing to implement a college access program. As a college degree becomes the necessary avenue towards a middle class lifestyle, these findings and previous research on this topic become more relevant and important to the field of education.

Social Support

A significant component and best practice the college access advisers spoke about was the ability to provide the students with social supports. They believed that fostering

a trusting relationship with their students was just as important as providing any other type of college going opportunity. These trusting relationships often began with the one-on-one counseling component between adviser and student with the adviser playing the role of the listener. Till, a college access adviser, shared a conversation he and a student had during a one-on-one session and he wanted to know what was the biggest benefit that the student got out of participating in this program. The student answered by saying that spending time with him and getting to know him as a person helped him to talk through those things that made him very nervous. The student added that his family did not really help him with this discussion of attending college, however he wanted to go to college to be successful because he saw what his mother's life was like with her two minimum wage jobs and that he never saw her because she was always working. College Access advisers have to be very sensitive to the needs and wants of their students. They also may need to realize that they may be the only adult in the student's life who is suggesting college as a postsecondary option.

Personnel

College access programs need to be extremely selective when hiring college access advisers. Essentially, the college access adviser is what makes a program successful. The ability of the adviser to form trusting relationships with students is the foundation and strength of any program. The advisers need to have high expectations for their students and not allow students' circumstances keep them from fulfilling their dreams to attend college. The advisers in this study neither expressed negative feelings nor harbored any stereotypes about their students and their families. The advisers, however, did acknowledge that the students they worked with came from low-income

families. More often than not, the students' parents lacked the financial resources to send their students to college without financial assistance. Advisers also acknowledged that for many of the students they would be the first in their family to attend college. However, they still expected their students to complete college applications and attend college the fall following high school graduation. College access advisers demonstrated compassion for the students' personal situations. They also demonstrated hope and the conviction that the students could change their life circumstances.

In order to provide the appropriate services for the students they work with, college access advisers should seek out and attend professional development opportunities. Beyond the learning of general college knowledge, advisers need to be aware of the emotional difficulties their students may face and the best practices for helping the students overcome or not allow these difficulties to be a barrier between themselves and postsecondary education.

College access advisers must also be resourceful and knowledgeable about the financial aid process. Studies indicate that many families who would be eligible for federal or state aid fail to complete the FAFSA. Advisers need to educate students and their families about all the financial aid options available to them. They also must assist families in finishing all the necessary paperwork including the FAFSA that must be completed in order to obtain any kind of financial aid.

Space

An additional implication of this study focused on the importance of space. The concept of a College Access Center seemed to support the advisers' efforts to convince low-income and first generation students that college was attainable. Students were more

likely to consider their futures when speaking with an adviser in a dedicated space rather than meeting half-hazard in the hallway. Advisers indicated that a college going culture had been established that began in the College Access Center. The room, with its pendants and acceptance letters, made the thought of matriculating to college more tangible for students who had never thought going to college was a postsecondary option.

Social Capital

This study found that exposing students to social capital such as networking with admissions representatives, attending a college fair or college tour, or just using the computer to learn about colleges and universities strengthened the students' college knowledge. This allowed them to make better choices when selecting a college. All the advisers particularly identified the college tours as an extremely significant experience to offer their students. Taking students on a college tour allowed the students to visualize accurately college as it really is and in turn visualize themselves in college. Students had the opportunity to see that students from various backgrounds attended college.

All five of the advisers also noted the importance of sitting down with a student when he or she was completing their first college application. This act forced a student to start the process with the college adviser by putting their words into actions and completing an application. As mentioned earlier in this section, the social supports and relationships with college access advisers is extremely important for a successfully run program in which students actually matriculate into a four-year college or university. However, many factors occurred between a student's first meeting with an adviser and that student's matriculation into college. To gain a better understanding of the process, please refer to the figure below. This flow chart is designed to emulate the components

that lead to college matriculation. The horizontal boxes represent the factors necessary to produce trust, which is the first step in the college going process. The vertical boxes are below the horizontal ones because they indicate what occurs after trust is formed.

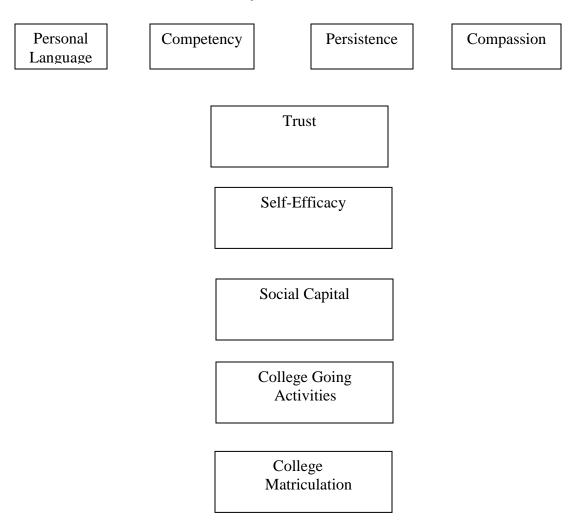


Figure 2. The flow of the college matriculation process beginning with the formation of trusting relationships between student and adviser and the downward flow to college matriculation once trust is formed.

As depicted in the figure above, actual college matriculation is the last step in a college access advisers' attempt to convince a low-income or first generation college bound student that college is the next appropriate step after high school. Establishing

trust must come before all other college going activities. For many low-income and first generation students, going to college right after high school may go against their families' and social network's social norms. The student must trust the adviser to take part in an unknown process. Throughout this process the adviser not only has to build a trusting relationship but also provide the student with opportunities for him or her to build their own self-efficacy to believe that he or she is smart enough and deserves to attend a four-year college or university. Trust and self-efficacy need to come before an exchange of social capital, participation in college going activities, or college matriculation can take place.

Barriers

An intangible barrier that appeared in several of the interviews but was not mentioned in the review of literature is the requirement to track specific data as proof of a programs' success. The college access advisers were frustrated with their funders' obsession with outcomes, which left no room for explanation of the steps that had to occur to reach these outcomes. One adviser complained that keeping track of all the data kept her from spending quality one-on-one time with her students.

Another barrier that appeared that was not cited in the literature review is the college access adviser's fear of depleted funding to continue his or her program year to year. All of the college access programs in this study relied on federal and state grants and contributions from private investors to keep their programs running. Consequently, there is a chance that these grant funded programs may be eliminated from the culture of the school at the end of every school year. This finding is surprising considering that the Obama administration has two specific goals for college, which are:

- All adults in America to pursue at least one year of higher education or career training.
- 2. America to regain its role as the world leader in college attainment.

The consequences for not completing some type of college or training program after high school graduation can create a lifelong financial struggle for individuals and their families. Consider the following facts discussed in Chapter 1:

- As the economy shifts from one of manufacturing goods to one of providing services, more jobs will require four-year degrees (Carnevale, Smith, & Strohl, 2013).
- Many more Americans need to complete college degrees in order to repopulate the United State's supply of highly skilled workers and to remain competitive in a global economy (Miller & Slocombe, 2012).
- One's level of education is the largest determinant of wage differences and continuous and sustainable employment among individuals (Baum, Ma, & Payea, 2013).
- Research indicates that only an estimated 26 percent of low-income students earned a four-year degree in six years compared to 56 percent of their high-income peers (National Center for Educational Statistics, 2011).

These facts all indicate the importance of postsecondary education for all students from all income levels.

Low-income and first generation students are often attending poorly funded schools in socioeconomically depressed neighborhoods or urban centers. Students may

begin their education already behind their middle class suburban peers. These barriers are evident in low- income and first generation students' grade point averages and entrance exam scores. College access programs and their advisers have the opportunity to level out the playing field for students at the collegiate level. With a college degree, an individual has the ability to potentially earn more money. Consequently, this increase in earning power allows for more equal opportunities for individuals to participate in the social and economic world of the middle class. College access advisers in this study indicated and appreciated the vast opportunities they had to assist students. The process and decision to seek a college degree has the potential to change a student's position in life forever.

Limitations of the Study

This case study only analyzed college access programs within one high school. Therefore, the practices and successes of these programs are limited to a single population of students. The practices that produce successful college going outcomes may be effective within this high school and with this specific population of students. The programs may not be successful in other schools. The conventions discovered in this research study can only be applied to this one school within this one context and the possibility of developing generalizations or theories to be applied to other college access programs may not be applicable. This high school was chosen because it utilized five college access programs, which is generally not the case in other high schools where there may be only one or no college access programs. For other high schools it may be difficult for one college access program to provide all the services and supports that five college access programs were able to provide this school's student body.

Another unavoidable limitation was the limited number of college access advisers interviewed and observed. Each college access program only employed one college access adviser. It would have been beneficial to the study to have observed and interviewed a larger number of advisers to determine if the components and best practices found were consistent across a larger group of college access advisers.

An additional limiting factor was that the five college access advisers had professional relationships with the researcher. Advisers may have either refrained from giving completely honest answers to the interview questions or they may have exaggerated their answers because they were aware of the purpose of the study. This however, is only speculation.

Finally, the factor of time was a limitation. Ideally, college access advisers would have been observed from the start of the 2014-2015 school year and continue to be observed throughout the academic year ending the observations with the students' graduation. This study took place over the course of two quarters. A longer period of study may have more accurately evaluated the components and best practices of advisers that lead to college matriculation for low-income and first-generation college bound students.

Recommendations for Further Research

The focus of this study was on five college access programs and their advisers operating within an urban high school in Western Pennsylvania. This high school was chosen because of two unique factors. First, the racial and socio-economical diversity of the student body, and secondly the large number of college access programs working simultaneously with the school's student body. The primary motivation for this case

study was to uncover the practices that college access centers use to affect students' aspirations and matriculation into colleges and other post secondary programs.

The following opportunities were created by college access advisers to assist low-income and first generation college bound students matriculate into college:

- one-on-one college counseling particularly during the college selection,
 college application completion and financial aid completion phases;
- a special space within the school for students to meet with college access advisers that contained a plethora of college going resources;
- social supports that provided students with appropriate college knowledge and social network supports.

In addition to the opportunities created for low-income and first generation students to matriculate into college, best practices were also identified that most likely led to low-income and first generation college bound students believing that attending college was the next step for them after high school graduation. Those best practices were:

- lifestyle discussions;
- academic programming;
- college tours;
- one-on-one college counseling;
- financial aid support;
- social supports.

The researcher recommends that the study be replicated in other school settings in order to generalize the findings. These school settings may include:

- A large public school similar to the one in this study;
- A rural school with a large population of low-income first generation students;
- A smaller public high school;
- A larger public high school;
- An alternative school;
- A school with a single college access program.

This case study offers the following recommendations based on the findings and themes identified by the CATE and personal interviews:

- The outcomes of this study that analyzed five colleges access programs could be compared to the outcomes in a similar school without the presence of college access programs.
- 2. Instead of interviewing and observing college access advisers, the students participating in the college access programs could be observed and interviewed. It would be interesting to learn about what the students think had the greatest impact on their decision to attend college.
- 3. A better survey could be designed as an instrument for teachers working in schools with college access programs. More teachers could be surveyed increasing the number of participants. The schools that scored higher and identified a positive college going culture could then be observed. This research would have the potential to compare and contrast college access programs and

- their components and best practices noting the differences between high scoring schools and low scoring schools.
- 4. The concept of establishing trusting relationships between the adviser and student before any college going activities took place could be examined in other educational contexts and professional relationships. For example, is trust a factor in teacher/student relationships or coach/player relationships and does the type of relationship affect the performance of the student in the class or the player on the field?
- 5. The study found that a large number of students were accepted to and matriculated into colleges and universities. It would be interesting to conduct a longitudinal study on these individuals to see how they fared once in college. The survey could answer questions such as: How many students remained in college until a degree was completed and How many of these students were able to obtain a well paying job. This kind of study could also ask the question does the successes of college access programs stop at the matriculation level or can college access programs affect a student's entire college going experience. Programs that track their students from high school throughout college could be examined and components and best practices of these types of programs could be identified.
- 6. Parents of low-income or first generation college bound students could be interviewed and asked questions about the type of postsecondary schools they desired their child to attend. Through this question, factors that influenced parents to choose one form of postsecondary education over another could be identified. In addition, parents' beliefs about postsecondary education could be

explored. College access programs could use the findings to create more parent participation in the college going process.

This mixed methods case study provided an understanding of opportunities and best practices college access advisers used to assist low-income and first generation college bound students matriculate to college. How these processes affected the overall culture of the school was also examined. The best practices and opportunities that contribute to college matriculation are significant. Students coming from disadvantaged academic and economical situations were given the supports necessary to further their education after highs school.

While the importance of the social supports provided by the advisers was identified in this study, it may be interesting to explore college access programs that favor college-going activities over one-on-one counseling and social supports. A comparison between the two methods could be explored.

Chapter 5 Summary

The primary motivation for this mixed methods case study was to uncover the practices college access programs and their advisers use to positively affect low-income and first generation college bound students' aspirations and matriculation into postsecondary education. The findings of this study indicated that the following items provided students with college going opportunities:

Students had the opportunity to receive one-on-one college counseling
 with an adviser to design an appropriate postsecondary plan. The advisers

- also individually assisted students when they were applying to colleges and completing the financial aid process.
- Students had the opportunity to work on their college related materials in a special space devoted to attending college. The space included many college going resources and the advisers themselves worked out of this space.
- Students had the opportunity to receive social supports throughout the
 entire college going process. Their social networks were strengthened by
 working with people who had college going knowledge.

The study also identified the following best practices college access advisers used to convince students that college was an attainable and realistic next step. Those best practices were:

- Lifestyle discussions that reinforced the idea that a college education was necessary for a comfortable lifestyle;
- Academic programming which provided remediation or tutoring for students struggling with their course work;
- College tours which made the concept of going to college real for many students who had never been on a college campus before;
- One-on-one counseling which gave students and opportunity to verbalize their postsecondary plan to someone knowledgeable in the higher education field;

- Financial aid support that assisted parents with the completion of the FAFSA form and other financial aid documents.;
- Social supports, which built students' sense of self-efficacy and belief that college was the appropriate next step after high school graduation.

This study obtained numerical data from the five college access advisers to highlight the outcomes of their efforts. In a high school of approximately 1,250 students where 68 percent of the student body is considered low-income the following college going activities took place:

- 239 SAT/ACT registrations
- 531 College applications submitted
- 314 College acceptances
- 123 FAFSAs completed
- 326 Financial aid documents completed
- 7 College campus tours

Evidence that low-income and first generation college bound students benefited from working with a college access adviser can be gleaned from this study. At the end of the 2014-2015 academic school year, the school could report that 90 percent of their students were attending either a two or four year college or university in the fall following their high school graduation. This figure is impressive considering that nationally only 50 percent of low-income high school graduates attend college following graduation (National Student Clearinghouse, 2013).

With the funding stream for public education constantly being cut, many schools do not have the resources available to house a college access program, particularly in low-income urban areas. Without the necessary supports, these students are denied the opportunities to obtain a postsecondary education. This is particularly troubling considering that the fastest growing occupations will require some form of training beyond high school including apprenticeships, trade schools, and two-year community colleges. However, most of these occupations will require a four-year college degree (Carnevale, Smith & Strohl, 2007). There will be fewer occupations in which students can master the skills on the job. Work requiring no training or on the job training will be low paying with little room for economic advancement (Bureau of Labor Statistics, 2013).

The difficulty of climbing the economic ladder negatively affects everyone in our society. Creating a system of higher education inaccessible to a significant portion of the population has detrimental implications. If the United States wishes to remain a global economical power, it must provide citizens, especially young citizens, with the academic resources and opportunities to obtain a college degree. As Thomas Jefferson wrote, "An educated citizenry is a vital requisite for our survival as a free people."

References

- Achieve Inc. (2012). The future of the U.S. workforce: the limited career prospects for high school graduates without additional education and training. Retrieved from www.achieve.org/files/LimitedCareerProspects.pdf
- Adelman, C. (2006). The toolbox revisited: paths to degree completion from high school through college. Retrieved from U.S. Department of Education website: www2.ed.gov/rschstat/research/pubs/toolboxrevisit/toolbox.pdf
- Aldana, U. (2013). Moving beyond the college preparatory high school model to a college going culture in urban Catholic high schools. *Catholic Education: A Journal of Inquiry and Practice*, 17(2), 131-153.
- Allen, W. R., Kimura-Walsh, E., & Griffin, K. A. (2009). Towards a brighter tomorrow:

 College barriers, hopes and plans of Black, Latino/a, and Asian American

 students in California. Charlotte, NC: Information Age Publishing, Inc.
- Alon, S. (2009). The evolution of class inequality in higher education: Competition, exclusion, and adaptation. *American Sociological Review*, 74, 731-755. doi: 10.1177/000312240907400503
- Alon, S. & Tienda, T. (2007). Diversity, opportunity, and the shifting meritocracy in higher education. *American Sociological Review*, 72(4), 487-511.
- American College Testing (2013). *The condition of college & career readiness 2013*.

 Retrieved from act.org/research/policymaker/cccr13
- American College Testing. (2010). *Mind the gaps: How college readiness narrows*achievement gaps in college success. Retrieved from

 act.org/research/policymakers/pdf/MindTheGaps.pdf

- American College Testing. (2008). The forgotten middle: Ensuring that all students are on target for college and career readiness before high school.

 Retrieved from act.org/research/policymakers/pdf/ForgottenMiddle.pdf
- Anderson, M. S., & Hearn, J.C. (1992). Equity effects in higher education. In W.E.

 Becker & D.R. Lewis (Eds.), *The economics of American higher education* (pp. 301-334). Boston: Kluwer Publishers.
- Appel, M., & Kronberger, N. (2012). Stereotypes and the achievement gap: Stereotype threat prior to test taking. *Educational Psychology Review*, 24, 609-635. doi: 10.1007/s10648-012-9200-4
- Archibald, R. B., & Feldman, D. H. (2011). Why does college cost so much. New York, NY: Oxford University Press, Inc.
- Armstrong, S. L., & Newman, M., (2011). Teaching textual conversations: Intertextuality in the college reading class room. *Journal of College Reading and Learning*, 41(2), 1-16.
- Ascher, C., & Maguire, C. (2007). Beating the odds: How thirteen NYC schools bring low-performing ninth-graders to a timely graduation and college enrollment.

 Retrieved from Annenberg Institute for School Reform at Brown University website: eric.ed.gov/?id=ED522199
- Autor, D. H., Levy, F., & Murnane, R. J. (2003). The skill content of recent technological change: An empirical exploration. *Quarterly Journal of Economics*, 118(4), 1279-1333.
- Avery, C., & Kane, T. J. (2004). *Student perceptions of college opportunities*. Retrieved from the Boston COACH Program website: http://www.nber.org/chapters/c10104

- Bailey, M. J., & Dynarski, S. M. D. (2011). Gains and gaps: Changing inequality in U.S. college entry and completion (NBER Working Paper No. 17633). Retrieved from University of Michigan personal website: www-personal-umich.edu/~baileymg/Bailey-Dynarski.pdf doi: 10.3386/w17633
- Balfanz, R. (2009). Can the American high school become an avenue of advancement for all? *The Future of Children*, 19(1), 17-38.
- Bandura, A. (2009). Cultivate self-efficacy for personal and organizational effectiveness, In E.A. Locke (Ed). *Handbook of Principals of Organization Behavior* (2nd ed.). (179-200), Oxford, UK, Blackwell.
- Bandura, A. (1986). The explanatory and predictive scope of self-efficacy. *Journal of Clinical and Social Psychology*, 4, 359-373.
- Bandura, A. (1982). Self-efficacy mechanism in human agency. *American Psychologist*, 37(2), 122-147.
- Bandura, A. (1977). Self-Efficacy: Toward a unifying theory of behavioral change.

 *Psychological Review, 84(2), 191-215.
- Bandura, A. (1971). Social Learning Theory. New York: NY: General Learning Press.
- Barnes, W., & Slate, J. R. (2010). College-Readiness: The current state of affairs.

 **Academic Leadership: The Online Journal, 8(4). Retrieved from http://www.academicleadership.org/article/college-readiness-the-current-state-of-affairs
- Baron, S, Field, J., & Schuller, T. (2002). Social capital: Critical perspectives. *Historical Social Research*, 27(4), 323-328.
- Basch, C. E. (2011). Vision and the achievement gap among urban minority youth.

- *Journal of School Health*, 81(10), 599-605.
- Baum, S. (2013). *Rethinking Pell Grants*. Retrieved from the College Board website: media.collegeboard.com/digitalServices/pdf/advocacy/policycenter/advocacy-rethinking-pell-grants-report.pdf
- Baum, S., Ma, J., & Payea, K. (2013). *Education pays 2013: The benefits of higher*education for individuals and society. Retrieved from the Lumina Foundation
 website: luminafoundation.org/files/resources/education-pays-2013.pdf
- Baum, S., & Ma, J. (2007). Education pays: The benefits of higher education for individuals and society. New York, NY: The College Board. Retrieved from the College Board website:

 https://advocacy.collegeboard.org/sites/default/files/2009_Trends_Education_Pays_report.pdfhttp://
- Bean, J., and Eaton, S. B. (2002). The psychology of underlying successful retention practices. *Journal of College Student Retention*, *3*(1), 73-89.
- Bedsworth W., Colby, S., & Doctor, J. (2006). *Reclaiming the American dream* (Report prepared for the Bridgespan Group Inc.). Retrieved from http://bridgespangroup.org/kno_articles_americandream.html.
- Bell, A. D., Rowan-Kenyon, H. T., & Perna, L. W. (2009). College knowledge of 9th and 11th grade students: Variations by school and state context. *Journal of Higher Education*, 80, 663-685.
- Berger, L. (2004). Income, family structure, and maltreatment risk. *Children and Youth Services Review*, *30*, 914-927.
- Berkner, L., He, S., & Cataldi, E. F. (2002). Descriptive summary of 1995–96 Beginning

- Postsecondary Students: Six years later (NCES 2003–151). Retrieved from U.S. Department of Education National Center for Education Statistics website: nces.ed.gov/pubs2003/2003151.pdf
- Berkowitz, S. (1997). Analyzing qualitative data. In J. Frechtling & L. Sharp (Eds.).

 User-Friendly handbook for mixed methods evaluations. Retrieved from the National Science Foundation website: nsf.gov/pubs/1997/nsf97153/start.htm
- Berliner, D. C. (2006). Our impoverished view of educational reform. *Teachers College Record*, 108(6), 949-955.
- Betts, J., Reuben, K., & Danenberg, A. (2000). Equal resources, equal outcomes? The distribution of school resources and student achievement in California. Retrieved from Public Policy Institute of California website:

 ppic.org/content/pubs/report/R_200JBR.pdf
- Black, S. (2006). Stabilizing schools with kids on the move. *Education Digest*, 72(3), 46-51.
- Blackwell, E. & Pinder, P. J., (2014). What are the motivational factors of first generation minority college students who overcome their family histories to pursue higher education. *College Student Journal*, 48(1), 45-56.
- Blaikie, N. (2000). Designing social research. Malden, MA: Polty Press.
- Blair, C., & Raver, C.C. (2012). Child development in the context of adversity. *American Psychology*, 67(4), 309-318.
- Bloom, D. E. (2006). *Education, help, and development*. Cambridge, MA: American Academy of Arts and Sciences. Retrieved from http://amacad.org/publications/ubase_edu_health_dev_pdf

- Boehner, J. A., & McKeon, H. B. (2003). The college cost crisis: A congressional analysis of college costs and implications for America's higher education system.

 Retrieved from U.S. House Committee on Education and the Workforce website: http://edworkforce.house.gov/issues/108th/education/highereducation/CollegeCostCrisisReport.pdf
- Bogdan, R., & Biklen, S. K. (2006). *Qualitative research for education: An introduction to theories and methods* (5th ed.). Upper Saddle Ridge, NJ: Pearson.
- Boothe, D. (2007). Why are so many black men in prison? A comprehensive account of how and why the prison industry has become a predatory entity in the lives of African American men. Memphis, TN: Full Surface Publishing.
- Borman, G. D. (2009). National efforts to bring reform to scale in America's highpoverty elementary and secondary schools: Outcomes and Implications.

 Washington DC: Center for Education Policy. Retrieved from
 http://files.eric.ed.gov/fulltext/ED504825.pdf
- Bourdieu. P. (1986). The forms of capital. In J. G. Richardson (Ed.), *Handbook of Theory* and *Research for theSociology of Education* (pp. 241-258). New York, NY:

 Greenwood Press.
- Bourdieu, P. (1984). *Distinction: A social critique of the judgment of taste*. Cambridge, MA: Harvard University Press.
- Bourdieu, P. (1977). *Outline of a theory of practice*. New York, NY: Cambridge University Press.
- Bourdieu, P. & Passeron, J. (1977). *Reproduction in education, society, and culture* (Theory, Culture, and Society Series). New York, NY: Sage Publications.

- Bourdieu, P. (1973). Cultural reproduction and social reproduction In R. Brown (Ed.), Knowledge, Education, and Cultural Change (pp. 71-112). London: Tavistock.
- Bourdieu, P. (1967). Systems of education and systems of thought. *Social Science Information*, 14(3), 338-358.
- Bowman, N., Kitayama, S., & Nisbett, R.E. (2009). Social class differences in self, attribution, and attention: Socially expansive individualism of middle class Americans. *Personality and Social Psychology Bulletin*, *35*(7), 880-893.
- Brewer, J., & Hunter, A. (1989). *Multi-method research: A synthesis of styles*. Thousand Oaks, CA: Sage Publications Inc.
- Brown v. Board of Educ., 347 U.S. 483 (1954).
- Buchman, C., Condron, D. J., & Roscigno, V. J. (2010). Shadow education, American style: Test preparation, the SAT, and college enrollment. *Social Forces*, 89(2), 435-461.
- Burdman, P. (2005). *The student debt dilemma: Debt aversion as a barrier to college*access. Retrieved from the Institute for College Access and Success, Inc. website:

 http://ticas.org/sites/default/files/pub-files/DebtDilema.pdf
- Bureau of Labor Statistics. (2014). *The employment situation* 2014. Retrieved from http://www.bls.gov/news.release/archives/empsit_01092015.pdf
- Bureau of Labor Statistics. (2013). *Employment by education by on the job training* category 2012 and projected 2022. Retrieved from http://bls.gov/emp/eptable_education_summary.htm
- Bureau of Labor Statistics (2009). Unemployed persons by marital status, race, Hispanic

- or Latino ethnicity, age, and sex. Retrieved from http://bls.gov/cps/aa2009/cpsaat24.pdf
- Burkham, D. T., Lee, V. E., & Dwyer, J. (2009). School mobility in the early elementary grades: Frequency and impact from nationally representative data. Retrieved from Foundation for Child Development website:

 http://fcdus.org/.sites/default/files/BurkhamSchoolMobilityInThe%20EarlyEleme ntaryGrades.pdf
- Cabrera, A. F., Deli-Amen, R., Prabhu, R., Terenzini, P. T., Lee, C., & Franklin, R. E. (2006). Increasing the college preparedness of at risk students. *Journal of Latinos and Education*, *5*(2), 1-24.
- CareerVision.org (2015). Global competition creates demand for STEM careers in science, technology, engineering and math. Retrieved from the Ball Foundation website: http://careervision.org/global-completition-creates-demand-for-stem-careers-science-technology-engineering-math
- Carnevale, A. P., Smith, N., & Strohl, J. (2013). *Recovery: Job growth and education*requirements through 2020. Retrieved from Georgetown Public Policy Institute

 Center on Education and the Workforce website:

 http://www.columbiagreeworks.org/Recovery2020.pdf
- Carnevale, A. P., Smith, N., & Strohl, J. (2010). *Help wanted: Projections of jobs and education requirements through 2018*. Retrieved from Georgetown Public Policy Institute Center on Education and the Workforce website:

 http://cew.georgetown.edu/report/help-wanted
- Cashin, S. (2005). The failures of integration: How race and class are undermining the

- American dream. New York, NY: Public Affairs.
- Ceballo, R., McLyod-Devey, V., & Toyokawa, T. (2004). The influence of neighborhood quality on adolescent educational values and school efforts. *Journal of Adolescent Research*, 19(6), 716-739. doi: 10.1177/0743558403260021
- Charmaz, K. (2006). Constructing grounded theory: A practical guide through qualitative analysis. London, UK: Sage.
- Chen, X. (2007). Part-Time Undergraduates in Postsecondary Education: 2003-04.

 (Postsecondary Education Descriptive Analysis Report. NCES 2007-165).

 Retrieved from U.S. Department of Education. National Center for Education

 Statistics website: nces.ed.gov/pubs2007/2007165.pdf
- Chen, R., & DesJardins, S. L. (2010). Investigating the impact of financial aid on student dropout risks: racial and ethnic differences. *The Journal of Higher Education*, 81(2), 179-208.
- Coleman, J. S. (1988). Social capital in the creation of human capital. *American Journal of Sociology*, 94, 95-120.
 - Coleman, J. S. (1966). *Equality of Educational Opportunity Study* (1966).

 Retrieved from Inter-university Consortium for Political and Social Research website: http://doi.org/10.3886/ICPSR06389.v3
- College Board. (2009). 2009 Seniors total group profile report. Retrieved from https://professionals.collegeboard.com/profdownload/cbs-2009-national-TOTAL-GROUP-pdf.
- Collins, J.W., Wambach, J, David, R. J., & Rankin, K. M. (2009). Women's lifelong

- exposure to neighborhood poverty and low birth weight: A population study. *Maternal and Child Health*, *13*(3), 326-333.
- Conley, D. T. (2010). College and career ready: Helping all students succeed beyond high school. San Francisco, CA: Jossey-Bass.
- Conley, D. T. (2007). *Redefining college readiness*. Retrieved from Educational Policy Improvement Center website:

 http://aypf.org/documents/RedefiningCollegeReadiness.pdf
- Conley, D. T. (2005). College knowledge: What it really takes for students to succeed and what we can do to get them ready. San Francisco, CA: Jossey-Bass.
- Cook, B. J., & Cordova, D. I. (2006). *Minorities in higher education: Twenty second*annual status report: 2007 Supplement. Retrieved from American Council on

 Education website: http://acenet.edu/news-room/Documents/Minorities-in
 Higher-Education-2007-Supplement-22nd.pdf
- Corbin, J., & Strauss, A. (1990). Grounded theory research: Procedures, canons, and evaluative criteria. *Qualitative Sociology*, *13*(1), 3-21.
- Corwin, Z. B., & Tierney, W.G. (2007). Getting there and beyond: Building a culture of college going in high schools. Retrieved from USC Center for Higher Education Policy Analysis website:

 http://usc.edu/dept/chepa/working/Getting%20There%20FINAL.pdf
- Covey, S. M. R. (2006). *The speed of trust: One thing that changes everything*. New York, NY: Free Press.
- Creswell, J. W. (2006). Qualitative inquiry and research design: Choosing among the five approaches. Thousand Oaks, CA: Sage Publications Inc.

- Creswell, J. W., & Clark, V. L. P. (2010). *Designing and conducting mixed methods* research. Thousand Oaks, CA: Sage Publications Inc.
- Creswell, J. W. (2010). Educational research: Planning, conducting, and evaluating quantitative and qualitative research. Upper Saddle Ridge, NJ: Prentice Hall.
- Creswell, J. W. (2006) Research design: Qualitative, quantitative, and mixed methods research approaches. Thousand Oaks, CA: Sage Publications Inc.
- Crowley, S. (2003). The affordable housing crisis: Residential mobility of poor families and school mobility of poor children. *The Journal of Negro Education*, 72(1), 22-38. doi: 10.2307/3211288
- Danielson, C. (2013). *The framework for teaching evaluation instrument, 2013 Edition*. Princeton, NJ: The Danielson Group.
- Danielson, C. (2007). Enhancing professional practice: A framework for teaching, 2nd Edition. Princeton, NJ: The Danielson Group.
- Davis, J. (2010). First generation student experience: Implications for campus practice and strategies for improving persistence and success. Sterling, VA: Stylus Publishing.
- Delgado Gaitan, C. (1991). Involving Parents in the Schools: A process of change for involving parents. *American Journal of Educational*, 100(1), 20-46.
- Denzin, N. K. (2009). *The research act: A theoretical introduction to sociological methods*. Chicago, IL: Aldine Transaction.
- DeParle, J. (2012, January 3). Harder for Americans to rise from lower rungs. *The New* York Times, pp. A1.

- Dohm, A., & Shniper, L. (2007, November). Occupational employment projections to 2016. *Monthly Labor Review*. Retrieved from Bureau of Labor Statistics website: http://bls.gov/pub/mir/2007/11/art5full.pdf
- Dougherty, C., Mellor, L., & Smith, N. (2006). *Identifying appropriate college readiness*standards for all students. Retrieved from National Center for

 Educational Accountability website: http://files.eric.ed.gov/fulltext/ED543027.pdf
- Dumais, S. A. (2002). Cultural capital, gender, and school success: The role of habitus. *Sociology of Education*, 75(1), 44-68. doi: 10.2307/3090253
- Duncan, G. J., & Magnuson, K. A. (2005). Can family socioeconomic resources account for racial and ethnic test score gaps? *Future of Children*, *15*(1), 35-54.
- Earle, T. C., & Cvetkovich, G. (1995). Social trust: toward a cosmopolitan society.

 Westport, CN: Praeger Publishers.
- Egan, T. (2005). No degree, and no way back to the middle In B. Keller (Ed), *Class Matters* (pp. 105-133). New York, NY: The New York Times Company.
- Engberg, M. E., & Allen, D. J. (2011). Uncontrolled destinies: Improving opportunities for low income students in American higher education. *Research in Higher Education*, 52(8), 786-807.
- Engberg, M. E., & Wolniak, G. C. (2010). Examining the effects of high school context on postsecondary enrollment. *Research in Higher Education*, *51*, 132-153.
- Engstrom, C., & Tinto, V. (2008). Access without support is not opportunity. *Change*, 40(1), 46-50.
- Espenshade, T J., & Radford, A. W. (2009). No longer separate, not yet equal: Race and

- class in elite college admission and campus life. Princeton, NJ: Princeton University Press.
- Evans, G. W., & Cassells, (2014). Childhood poverty, cumulative risk exposure, and mental health in emerging adults. *Clinical Psychological Science*, 2(3), 287-296. doi: 1177/2167702613501496
- Evans, G. W., Kim, P., Ting, A. H., Tesher, H. B., & Shannis, D. (2007). Cumulative risk, maternal responsiveness and allostatic load among young adolescents.

 *Developmental Psychology, 43(2), 341-351.
- Evans, G. W. (2004). The environment of childhood poverty. *American Psychologist*, 59(2), 77-92.
- Fantuzzo, J., & Perlman, S. (2007). The unique impact of out of home placement and the mediating effects of child maltreatment and homelessness on early school success. *Children and Youth Services Review*, 29(7), 941-960.
- Farkas, G., Grobe, R. D., Sheehan, D., & Shuan, Y. (1990). Cultural resources and school success: Gender, ethnicity, and poverty groups within an urban school district.

 *American Sociological Review, 55(1), 127-142.
- Farmer-Hinton, R. L. (2008). Creating opportunities for college access: Examining a school model designed to prepare students of color for college. *Multicultural Perspectives*, 10(2), 73-81.
- Farmer-Hinton, R. L. (2002). The Chicago context: Understanding the consequences of urban processes on school capacity. *Journal of Negro Education*, 71(4), 313-330.
- Ferguson, R. F. (2000). Certification test scores, teacher quality, and student

- achievement. In D. Grissmer & J. M. Ross (Eds), *Analytic issues in the* assessment of student achievement (pp 133-156). Washington, DC: National Center for Educational Statistics.
- Ferguson, R. F. (1991). Paying for public education: New evidence on how and why money matters. *Harvard Journal of Legislation*, 28(2), 465-498.
- Ford, D. Y., Moore, J. J., & Whiting, G. (2008). Conducting cross-cultural research: Causations, concerns, and considerations. *Roeper Review*, *30*, 1-11.
- Foster, J. M., Leppma, M., & Hutchinson, T. S. (2014). Students perspectives on gate-keeping in counselor education: A case study. *Counselor Education* & *Supervision* 53(3), 190-293. doi: 10.1002/j.1556-6978.2014.00057.x
- Fox, M. A., Connolly, B. A., & Snyder, T. D., (2005). *Youth indicators 2005: Trends in the well-being of American youth*. Washington, DC: U.S. Department of Education National Center of Education Statistics.
- Frankenberg, E., & Orfield, G. (2007). Lessons in integration: Realizing the promise of racial diversity in American Schools. Charlottesville, VA: University of Virginia Press.
- Frankenberg, E., Lee, C., & Orfield, G. (2003). A multiracial society with segregated schools: Are we losing the dream? Cambridge, MA: The Civil Rights Project Harvard University.
- Frankenberg, R. (2005). White woman, race Matters: The social construction of whiteness. Minneapolis, MN, University of Minnesota Press.
- Freeman, R. B. (2008). The new global labor market. Focus, 26(1), 1-6.
- Freidman, T. L. (2007). The world is flat: A brief history of the twenty-first century. New

- York, NY: Picador.
- Fry, R., & Gonzales, F. (2008). *One-in-five and growing fast: A profile of Hispanic public school students*. Retrieved from Pew Research Center website:

 http://www.pewhispanic.org/2008/08/26/one-in-five-and-growing-fast-a-profile-of-hispanic-public-school-students/
- Funkhouser, J. E., & Gonzales, M. R. (1998). Family involvement in children's education, successful local approaches: An idea book. Ann Arbor MI: University of Michigan Press.
- Gambetta, D. (1990). *Trust: Making & Breaking Cooperative Relations*. Oxford, UK: Blackwell.
- Gandara, P. (2001). Paving the way to postsecondary education: K-12 intervention programs for underrepresented youth. Retrieved from National Postsecondary Education Cooperative Working Group on Access to Postsecondary Education website: http://nces.ed.gov/pubs2001/2001205.pdf
- Gay, L. R., Mills, G. M., & Airasian, P. (2009). *Educational research: Competencies for analysis and applications*. Upper Saddle Ridge, NJ: Pearson.
- Geldman, A. (2014, July 24). Meritocracy won't happen: The problem's with the 'ocracy. *The Washington Post*. Retrieved from http://thewashingtonpost.com.
- Gillen, A., Selingo, J., & Zatynski, M. (2013). *Degrees of value: Evaluating the return on the college investment*. Retrieved from Education Sector at American Institutes for Research website: http://educationpolicy.air.org/publications/degrees-value-evaluating-return-college-investment
- Goldrick-Rab, S., & Pfeffer, F. T. (2009). Beyond access: Explaining socioeconomic

- differences in college transfer. *Sociology of Education*, 82(2), 1-25. doi: 10.1177/003804070908200201
- Goldrick-Rab, S. (2006). Following their every move: How social class shapes postsecondary pathways. *Sociology of Education*, 79(1), 61-79. doi: 11//7003804070607900104
- Gottlieb, D. J., Beiser, A. S., & O'Connor, G. T. (1995). Poverty, race, and medication use are correlates of asthma hospitalization rates. *American College of Chest Physicians*, 108(1), 28-35.
- Gonzalez, K. P., Stone, C., & Jovel, J. E. (2003). Examining the role or social capital in access to college for Latinas: Toward a college opportunity framework. *Journal of Hispanic Higher Education*, 2(1), 146-170.
- Goddard, R. D. (2003). Relational networks, social trust, and norms: A social capital perspective on students' chances of academic success. *Educational Evaluation* and Policy Analysis, 25(1), 59-74.
- Greene, J. C. (2007). Mixed methods in social inquiry: Research methods for the social sciences. Hoboken, NJ: John Wiley and Sons Inc.
- Greene, J. C., Caracelli, V. J., & Graham, W. F. (1989). Toward a conceptual framework for mixed method evaluation design. *Educational Evaluation, and Policy Analysis*, 11(3), 255-274.
- Grissmer, D. W., & J. M. Ross (Eds.) *Analytic Issues in the assessment of student achievement*. Washington DC: National Center for Education Statistics.
- Grodsky, E., & Jones, M. T. (2005). Real and imagined barriers to college entry: Perceptions of cost. *Social Science Research*, *36*, 745–766.

- Gubbins, C., & MacCurtain, S. (2008). Understanding the dynamics of collective learning: The role of trust and social capital. *Advances in Human Development*, 10(4), 578-599.
- Gulson, K. N., & Symes, C. (2007). Knowing one's place: Space, theory, education. *Critical Studies in Education*, 48(1), 97-110. doi: 1080/17508480601123750
- Gurin, P. (1999). Expert testimony in the cases *Gratz et al.*, v *Bollinger et al.*, and *Grutter et al.*, v *Bollinger et al.*, Ann Arbor, MI: University of Michigan.
- Hanushek, E. A., & Rivkin, S. G. (2008). Harming the best: How schools affect the black-white achievement gap. *Journal of Policy Analysis and Management*, 28(3), 366-393.
- Hanushek, E. A., Kain, J. F., & Rivkin, S. G. (2004). Why public schools lose teachers. *Journal of Human Resources*, 39(2), 326-354.
- Hanushek, E. A., & Raymond, M. E. (2003). Lessons about the design of state accountability systems. In P. E. Peterson & M. R. West (Eds.), No *child left behind: The politics and practice of school accountability* (pp. 127-151). Washington, DC: Brookings Institution Press.
- Harris, D. N., & Harrington, C. D. (2006). Ending the blame game on educational inequality: A study of "high flying" schools and NCLB. Retrieved from Education Policy Research Unit Arizona State University website: http://greatlakescenter.org/docs/Policy-
- Breifs/Ending%20the%20Blame%20Game-%20Doug%20Harris.pdf
 Harvill, E., Maynard, R. A., Nguyen, H. T. H., Robertson-Kraft, C., & Tognatto, N.

- (2012). Effects of college access programs on college readiness and enrollment:

 A meta- analysis. Paper presented at the 2012 Spring Society for Research on

 Educational Effectiveness Conference. Retrieved from

 http://conference2012/program/downloads/abstracts/520/pdf.
- Haveman, R., & Smeeding, T. (2006). The role of higher education in social mobility. Future of Children, 16(2), 125-150.
- Haycock, K., & Peske, H. G. (2006). *Teaching inequality: How poor and minority*students are shortchanged on teacher quality. Washington, DC. The Education

 Trust.
- HCM Strategists (2013). The American dream 2.0: How financial aid can help improve college access, affordability, and completion. Washington, DC: HCM Strategists, LLC. Retrieved from http://hcmstrategists.com/Americandream20/report/HCM_Gates_report_1_17_web.pdf
- Hearn, J. C. (2001). The paradox of growth in federal aid for college students, 1960-1990. In M. B. Paulsen & J. C. Smart (Eds.), *The finance of higher education:*Theory, research, policy, and practice (pp. 267-320). New York, NY: Agathon Press.
- Heckman, J. J. (2006). Skill formation and the economics of investing in disadvantaged children. *Science*, *132*, 1900-1902.
- Hochschild J. L. (2003). Rethinking accountability politics In P. Peterson & M. West (Eds.), *No child left behind: The politics and practices of school accountability* (pp. 107-125). Washington, DC: Brookings Institution Press.
- Horn, L., Cataldi. E. F., & Sikora, A. (2005). Waiting to attend college: Undergraduates

- who delay their postsecondary enrollment. Washington, DC: National Center for Educational Statistics.
- Hotchkiss, J. L., & Shiferaw, M. (2010). *Decomposing the education wage gap:*Everything but the kitchen sink. Paper No. 2010-12. Federal Reserve Bank of Atlanta. Retrieved from http://ideas.repec.org/p/fip/fedawp/2010-12.html
- Isaacs, J. B. (2007). *Economic mobility of black and white families*. Retrieved from The Brookings Institute website:

 http://brookings.edu/researchpaper/2007/11/blackwhite-isaacs
- Jacob, B. A. (2003). A closer look at achievement gains under high-stakes testing in Chicago. In W. G. Gale & J. R. Pack (Eds.), *Brookings-Wharton papers on urban* affairs (pp269-291). Washington DC: Brookings Institution Press.
- Jackson, M. I. (2015). Cumulative inequality in child health and academic achievement. *Journal of Health and Social Behavior*, 56(2), 262-280. doi:

 10.1177/0022146515581857
- Jennings, M. & Lynn, M. (2005). The house that race built: Critical pedagogy, African-American education, and the re-conceptualization of a critical race pedagogy, *Educational Foundations*, 19 (3-4), 15-32.
- Jensen, E. (2013). Engaging students with poverty in mind: Practical strategies for raising achievement. Alexandria, VA: Association for Supervision and Curriculum Development.
- Jiang, Y., Ekono, M., & Skinner, C. (2014). Basic facts about low-income children.
 Retrieved from Columbia University, National Center for Children in Poverty website: http://nccp.org/publications_1089.html.

- Jick, T. D. (1979). Mixing qualitative and quantitative methods: Triangulation in action. *American Science Quarterly*, 24(4), 602-611.
- Johnson, I. (2008). Enrollment, persistence, and graduation of in-state students at a public research university: Does high school matter. *Research in Higher Education*, 49, 776-793.
- Jun, A., & Colyar, J. (2002). Parental guidance suggested: Family involvement in college prep programs. In W. Tierney & L.S. Hagedorn (Eds.), *Increasing access to* college: extending possibilities for all students (195-216). Albany, NY: State University of New York Press.
- Kneebone, E., & Williams, J. (2013). New census data underscore metro poverty's
 persistence in 2012. Retrieved from Brookings Institute website:

 http://brookings.edu/research/reports/2013/09/19-census-data-poverty-kneebone-williams
- Kirsch, I., Braun, H., Yamamoto, K., & Sum, A. (2007). *America's perfect storm: Three forces changing our nation's future*. Princeton, NJ: Educational Testing Services.
- Knapp, L. G., Kelly-Reid, J. E., Whitmore, R. W., Wu, S., Huh, S., & Levine, B. (2005),
 Enrollment in postsecondary institutions, Fall 2002 and Financial Statistics,
 Fiscal Year 2002. Retrieved from National Center for Education Statistics
 website: http://rti.org/publications/abstract.cfm?pubid=11511
- Kornrich, S., & Furstenberg, F. (2013). Investing in children: Changes in parental spending on children, 1972 to 2007. *Demography*, 50(1), 1–23. doi: 10.1007/s13524-012-0146-4
- Kozol, J. (2005). The shame of the nation: The restoration of apartheid schooling in

- America. New York, NY: Crown Publishers.
- Kozol, J. (1991). Savage inequalities: Children in America's schools. New York, NY: Harper Perennial.
- Krenichyn, K., Saeger, S., & Evans, G. (2001). The neighborhoods they live in: The effects of neighborhood residence on child and adolescent outcomes.

 *Psychological Bulletin, 126(2), 309-337.
- Krugman, P. (2002, October 20). For richer. *New York Times Magazine*. Retrieved from http://nytimes.com/pages/magazine/index.html
- Kuh, G. D., Kinzie, J., Buckley, J. A., Bridges, B., & Hayek, J. (2006). What matters to student success: A review of the literature. Retrieved from National Center for Educational Statistics website: http://nces.ed.gov/npec/pdf/kum_team_reports.pdf
- Lareau, A. (2011). *Unequal childhoods: Class, race, and family life with an update a decade later*. Oakland, CA: University of California Press.
- Lareau, A. (2002). Invisible inequality: Social class and childbearing in black and white families. *American Sociological Review*, 67(5), 747-776.
- Lareau, A., & Horvat, E. M. (1999). Moments of social inclusion and exclusion: Race, class, and cultural capital in family-school relationships. *Sociology of Education*, 73(1), 37-54.
- Larrance, A. J. (2007). A holistic approach of access to higher education. *New Directions* for Higher Education, 138, 51-57.
- Lautz, J., Hawkins, D., & Perez, A. B. (2013). The high school visit: Providing college counseling and building crucial K-16 links among students, counselors, and admissions officers. *Journal of College Admissions*, 214, 108-116.

- Leander, K. M., Phillips, N. C., & Taylor, K. T. (2010). The changing social spaces of learning: Mapping new Mobilities. *Review of Research in Education, 34*, 329-394. Retrieved from http://peabody.vanderbilt.edu/department/tl/teaching_and_learning_research/space_learning_mobility/Leander_social_spaces.pdf
- Lee, M. A., & Mather, M. (2008). *U.S. Labor Force and Trends*. Retrieved from Population Reference Bureau website: prb.org/pdf08/63.2uslabor.pdf
- Leonhardt, D. (2005) The College Dropout Boom. In B. Keller (Ed.), *Class Matters* (pp. 87-104). New York, NY: The New York Times Company.
- Leventhal, T., & Brooks-Gunn, J. (2000). Parents as moderators of psychological and physiological correlates of inner city children's exposure to violence. *Applied Developmental Psychology*, 22, 581-602.
- Levine, L. (2012). The U.S. income distribution and mobility: Trends and international comparisons. Retrieved from digitalcommons.ilr.cornell.edu/cgi/viewcontent.cgi?article=1904&context=key_workplace
- Lewin, T. (2005). Up from the holler: Living in two worlds at home in neither. In B. Keller (Ed.), *Class Matters* (63-72). New York: NY, The New York Times Company.
- Lewis, A. E. (2003). Race in the school yard: Negotiating the color line in classrooms and communities. New Brunswick, NJ: Rutgers University Press.
- Liston, C., McEwen, B.S., & Casey, B. J. (2009). Psychological stress reversibly disrupts

- prefrontal processing and attention control. *Proceedings of the National Academy of Science*, 106(3), 912-917. Retrieved from http://pnas.org/content/106/3/912-full
- Long, B. T., & Kurlaender, M. (2009). Do community colleges provide a viable pathway to a baccalaureate degree? *Educational Evaluation and Policy Analysis*, 31(1): 30-53.
- Long, B. T., Riley, E. (2007). Financial aid: A broken bridge to college access. *Harvard Educational Review*, 7(1), 39-64.
- Luby, J., Belden, A., Botteron, K., Marrus, N., Harms, M., Babb, C., Nishino, T., & Bearch, D. (2013). The effects of poverty on childhood brain development: The meditating effect of care-giving and stressful life events. *JAMA Pediatrics*, *167*(12), 1135-1142.
- Mangino, W. (2013). A critical look at oppositional culture and the race gap in education.

 International Scholarly Research Notices Education, 2013, 1-5. Retrieved from http://hindawi.com/journals/isrn/2013/363847
- Marina, B. L. H., & Holmes, N. D. (2009). Bottom line: Education is the great equalizer.

 Or is it? *About Campus*, 14(3). 29-32.
- Marx, A. W. (2005, May 22). Amherst College commencement address. (transcript).

 Speech at the 184th Commencement at Amherst College on May 22, 2005,

 Amherst, MA. Retrieved from the Amherst College website:

 https://www3.amherst.edu/commencement/2005/marx_address.html
- Marshall, K. (2009). Rethinking teacher supervision and evaluation: How to work smart, build collaboration, an close the achievement gap. San Francisco, CA: John Wiley and Sons, INC.

- Marying, P. (2007) Introduction: Arguments for mixed methodology in P. Marying, G. L. Huber, L. Gurtier, & M. Kiegelmann (Eds.), *Mixed methodology in psychological research* (pp. 1-4). Rotterdam: Sense Publishers.
- Maslansky, M., West, S., DeMoss, G., & Saylor, D. (2010). *The language or trust:*Selling ideas in a world of skeptics. New York, NY: Prentice Hall Press.
- Mason, J. (1996). *Qualitative Researching*. London: Sage Publications.
- Massey, D. (2007). Categorically unequal. NY, New York: Russel Sage Foundation.
- Massey, D. S., Charles, C. Z., Lundy, G. F., & Fischer, M. J. (2003). The source of the river: The social origins of freshman at America's selective colleges and universities. Princeton, NJ. Princeton University Press.
- McDonough, P. M. (2005). Counseling and college counseling in America's high schools. Alexandria, VA: National Association of College Admissions Counselors.
- McDonough, P. M. (2005). Counseling maters: Knowledge, assistance and organizational commitment in college preparation. In W. Tierney, Z. Corwin, & J. Colyar (Eds.),

 Preparing for college: Nine elements of effective outreach. Albany, NY. State
 University of New York Press.
- McDonough, P. M. (2004). *The school-to-college transition: Challenges and prospects*. Washington DC: American Council on Education.
- McDonough, P. M. (1997). Choosing colleges: How social class and schools structure opportunity. Albany, NY: State University of New York Press.
- McKillip, M. E. M., Godfrey, K. E., & Rawls, A (2013). Rules of engagement: Building a college going culture in an urban school. *Urban Education*, 48(4), 529-556.

- McLanahan, S. (2004). Diverging destinies: How children are faring under the second demographic transition. *Demography*, 41(4), 607-627.
- McPhearson, M. S., & Shapiro, M. O. (2006). *College access: Opportunity or privilege*. New York, NY: The College Board.
- Merriam, S. B., & Associates (2002). Qualitative research in practice: Examples for discussion and analysis. San Francisco: Jossey-Bass.
- Menyuk, P. (1980). Effect of persistent otitis media on language development. *Annals of Otology, Rhinology, and Laryngogly Supplement*, 89(3), 257-263.
- Miller, D. S., & Slocombe, T. E. (2012). Preparing students for the new reality. *College Student Journal*, 46(1), 18-25.
- Morrissey, T. W., Hutchinson, L., & Winsler, A. (2014). Family income school attendance, and academic achievement in elementary schools. *Developmental Psychology*, 50(3), 741-753.
- Murphy, R. (1988). *Social closure: The theory of monopolization and exclusion*. Oxford:

 Oxford University Press.
- National Center for Education Statistics (2013). *Trends in high school dropout and completion rates in the United States*, Retrieved from National Center for Education Statistics website:

 http://nces.ed.gov/programs/digest/d13/tables/dt13/_219.70asp
- National Center for Education Statistics (2012). *An overview of classes taken and credits*earned by beginning postsecondary students. Retrieved from

 http://nces.ed.gov/pubs/2013151/rev.pdf.
- National Center for Education Statistics. (2011). The condition of education section 3

- student effort and educational progress, Retrieved from http://nces.ed.gov/pubs2011/2011033_4.pdf
- National College Access Network. (2012). Common measures for college access and success. Retrieved October 12, 2012, from http://collegeaccess.org/Commonmeasuresfor access.
- National College Access Network, (2012). *College matriculation indicators*. Retrieved from http://collegeaccess.org/Common_Measures
- National Science Foundation. (2004). Science and engineering indicators, 2004.

 Retrieved from National Science Foundation website:

 http://nsf.gov/statistics/seind04/pdf/volume/pdf
- National Student Clearinghouse. (2013). National college progression rates: For high schools participating in the National Student Clearinghouse Student Tracker service (High School Benchmarks 2013 report). Retrieved from http://nscresearchcenter.org/hsbenchmarks2013
- Neuman, S. (2013). The American dream: Slipping away. *Educational Leadership*, 7(8), 18-3.
- Newbaker, P. (2013). Tracking the road to college success: Inaugural national high school benchmarks report. Retrieved from The National Student Clearinghouse Research Center website:

 http://studentclearinghouse.org/about/media_center/press_releases/files/release_presskit_2013-10-15.pdf
- Nikulina, V., Widom, C. S., & Czaja, S. (2011). The role of childhood neglect and

- childhood poverty in predicting mental health, academic achievement, and crime in adulthood. *American Journal of Community Psychology*, 48, 309-321.
- Noguera, P. A. (2008). The trouble with black boys: And other reflections on race, equity, and the future of public education. San Francisco, CA: Jossey-Bass.
- Noguera, P. A. (2003). City schools and the American Dream: Reclaiming the promise of public education. New York, NY: Teachers College Press.
- Nora, L. M. (2002). Academic medicine gets a poor report card: What are we going to do? *Academic Medicine*, 77(10), 1062-1066.
- Oakes, J. (2003). Critical conditions for equity and diversity in college access: Informing policy and monitoring results. Retrieved from University of California and All Campus Consortium on Research for Diversity website:

 http://ucaccord.gseis.ucla.edu/research/indicators/pdfs/criticalconditions.pdf
- Ogbu, J. (2003). Black students in an affluent suburb: A study of academic disengagement. Mahwah, NJ: Erlbaum.
- Ogbu, J.U. (1983). Minority status and schooling in plural societies. *Comparative Education Review* 27(2), 168-190.
- Olson, L., & Jerald, C. D. (1998, January 8). The achievement gap. *Education Week*, pp. 10. Orfield, L, & Lee, C. (2007). Historic reversals, accelerating re-segregation, and the need for new integration strategies. *The Civil Rights Project*. University of California.
- Orfield, L, Losem, D., Wald, J., Swanson, C. (2004). Losing our future: How minority

- youth are being left behind by the graduation rate crisis. Retrieved from The Civil Rights Project at Harvard University website: http://columbus.k12.nc.us/dropout/410936_LosingOurFuture.pdf
- Orfield, G. (2001). Schools more separate: Consequences of a decade of resegregation.

 Retrieved from Civil Rights Project University of California Los Angeles website: http://civilrightsproject.ucla.edu/research/k-12-education/integration-and-diversity/schools-more-separate-consequences-of-a-decade-of-resegregation/orfield-schools-more-separate-2001.pdf
- Ofrield, G. (2000). Our re-segregated schools. *Principal*, 79(5), 6-11.
- Oseguera, L., Locks, A. M., & Vega, I. I. (2009). Increasing Latina/o students baccalaureate attainment. *Journal of Hispanic Higher Education*, 8(1), 23-53.
- Park, J. J., Denson, N., & Bowman, N. A. (2013). Does socioeconomic diversity make a difference? Examining the effects of racial and socioeconomic diversity on the campus climate for diversity. American Educational Research Journal, 50, 466-496.
- Perna, L. P., Rowan-Kenyon, H., Bell, A., Thomas, S. L., & Li, C. (2008). A typology of federal and state programs designed to promote college enrollment. *The Journal of Higher Education*, 79(3), 243-267.
- Perna, L. W., & Thomas, S. T. (2008). Theoretical perspectives on student success:

 and promoting success for all Understanding the contributions of the disciplines:

 ASHE Higher Education Report. 34(1). San Francisco, CA: Jossey-Bass.
- Perna, L. W., & Thomas, S. L. (2006). A framework for reducing the college success gap.

- Retrieved from National Postsecondary Education Corporative website: http://web.ewu,.edu/groups/academicaffairs/IR/NPEC_3_Perna_Thomas_Report.pdf
- Perna, L. W. (2005). The benefits of higher education: Sex, racial/ethnic, and socioeconomic group differences. *Review of Higher Education*, 29(1), 23-52.
- Perna, L. W., & Titus, M. A. (2005). The relationship between parental involvement as social capital and college enrollment: An examination of racial/ethnic group differences. *The Journal of Higher Education*, 76(5), 485-518.
- Perna, L. W. (2000). Differences in the decision to attend college among African

 Americans, Hispanics and Whites. *The Journal of Higher Education*, 71, 117-141.
- Peterson, P., & West, M, (2003). No child left behind: The politics and practices of school accountability. Washington, D.C.: Brookings Institution Press.
- Pettigrew, T. F., & Tropp, L. R. (2006). A meta-analytic test of intergroup contact theory. *Journal of Personality and Social Psychology*, 90(5), 751-783.
- Petty, K. (2013). *Merit based financial aid puts low-income students at disadvantage*.

 Retrieved from Independent Voter Network website:

 http://ivn.us/2013/09/30/merit-based-financial-aid-puts-low-income-students-at-disadvantage/
- Piketty, T. R. (2014). *Capital in the Twenty First Century*. Cambridge, MA: President and Fellows of Harvard College.
- Piketty, T., & Saez, E. (2003). Income inequality in the United States, 1913-1998.

 Quarterly Journal of Economics, 68, 1-39.
- Putnam, R. D., Frederick, C. B., & Snellman, K. (2012). Growing class gaps in social

- connectedness among American youth. Retrieved from Harvard Kennedy School of Government website:
- http://hks.harvard.edu/content/download/70585/verision/1/file/sagudroreport_DivergingSchoolConnectedness_20120808.pdf
- Ravitch, D. (2010). The death and life of the great American school system: How testing and choice are undermining education. New York, NY: Basic Books.
- Reardon, S. F., Baker, R., & Klasik, D. (2012). *Race, income, and enrollment patterns in highly selective colleges, 1982-2004*. Retrieved from Stanford Center for Education Policy Analysis website: http://cepa.stanford.edu/content/race-income-and-enrollment-patterns-highly-selective-colleges-1982-2004
- Reardon, S. F. (2013). The widening income achievement gap. *Educational Leadership*. 70(8), 10-16.
- Reardon, S. F. (2011). The widening academic achievement gap between the rich and the poor: New evidence and possible explanations In G. J. Duncan & R. J. Murname (Eds.), *Wither opportunity: Rising inequality, schools, and children's life chances*. (pp. 91-116). New York, NY: Russell Sage.
- Richards, C. E. (1998). A typology of educational monitoring systems. *Educational Evaluation and Policy Analysis*, 10, 106-116.
- Robbins, D. (2005). The origins, early development, and status of Bourdieu's concept of 'cultural capital.' *The British Journal of Sociology*, *56*(1), 13-30.
- Rochford, J., O'Neill, A., Gelb, A., & Ross, K. (2011). Reaching for 80%: How post secondary opportunities in high schools are changing the college going culture in

- Stark County, Ohio. Retrieved from Stark Education Partnership website: http://www.edpartner.org/pdfs/Reaching_for_80.pdf
- Roderick, M., Coca, V., & Nagaoka, J. (2011). Potholes on the road to college: High school effects in shaping urban students participation in college application, four-year college enrollment, and college match. *Sociology of Education*, 84(3), 178-211.
- Roderick, M., Nagaoka, J., & Coca, V. (2009). College readiness for all: The challenge for urban high schools. *The Future of Children*, 19(1), 185-210.
- Roderick, M., Nagaoka, J., Coca, V., Moeller, E., Roddoe, K., Gilliam, J., & Patton, D. (2008). From high school to the future: Potholes on the road to college. Chicago, IL: Consortium on Chicago School Research.
- Roksa, J., & Potter, D. (2011). Parenting and academic achievement: Intergenerational transmission of educational advantage. *Sociology of Education*, 84(4), 299-321.
- Roscigno, V. J., Tomaskovic-Devey, D., & Crowley, M. (2006). Education and the inequalities of place. *Social Forces*, 84, 2121-2145.
- Ross, T., & Kena, G. (2012). *Higher education: Gaps in access and persistence study*.

 Retrieved from National Center for Education Statistics website:

 http://nces.ed.gov/pubs2012/2012046.pdf
- Rothstein, B., & Uslaner, E. M. (2005). All for one: Equality, corruption, and social trust. *World Politics*, 58(1), 41-72.
- Ryan, J. E. (1999). Schools, race, and money. *The Yale Law Journal*, 109(2), 249-316.
- St. John, E. (2003). Refinancing the college dream: Access, equal opportunity, and justice for taxpayers. Baltimore: John Hopkins University Press.

- Saez, E (2015). Striking it richer: The evolution of top incomes in the United States (updated with 2013 preliminary estimates). Retrieved from http://eml.berkley.edu/~saez/saez-UStopincomes-2013.pdf
- Sanbonmatsu, L., Kling, J., Duncan, G., & Brooks-Gunn, J. (2006). Neighborhoods and academic achievement: Results from the "Moving to Opportunity" experiment.

 **Journal of Human Resources, 41(4), 649-691.
- Sanderson, D. (2003). Engaging highly transient students. *Education*, 123(3), 600-606.
- Santow, R., & Rothstein, R. (2012). A different kind of choice: Educational inequality and the continuing significance of racial segregation. Retrieved from Economic Policy Institute website http://www.epi.org/publications/educational-inequality-racial-segregation-significance/
- Sargent, J., Brown, M. J., Freeman, J., Bailey, A., Goodman, D., & Freeman, D. (1995).

 Childhood lead poisoning in Massachusetts communities. *American Journal of Public Health*, 85(4), 528-534.
- Savitz-Romer, M. (2012). The gap between influence and efficacy: College readiness training, urban school counselors, and the promotion of equity. *Counselor Education and Supervision*, *51*(2). 98-111.
- Sawhill, I.V., Winship, S., & Grannis, K. S. (2012) *Pathways to the middle class:**Balancing personal and public responsibilities. Retrieved from The Brookings

 Institution website: http://brookings.edu/research/paper/2012/09/20-pathways-middle-class-sawhill-winship
- Schneider, B. (2007). Forming a college going culture in U.S. public high schools.

- Retrieved from National Association of State Student Grant and Aid Programs website:
- from http://nassgap.org/library/docs/CollegeGoing.pdf
- Schneider., B., & Bryk, A. (2004). *Trust in schools: A core resource for improvement*. New York, NY: Russell Sage Foundation.
- Schutz, A. (1963). Common-sense and scientific interpretation of human action. In M. A. Natanson (Ed.), *Philosophy of the Social Sciences* (pp. 258-276). New York, NY: Random House .
- Schwartz, C. R., & Mare, R. D. (2005). Trends in educational assertive marriage from 1940 to 2003. *Demography*, 42(4), 621-646.
- Scott, J., & Leonhardt, D. (2005). Shadowy lines that still divide In B. Keller (Ed.), *Class Matters* (pp. 1-26). New York, NY: The New York Times Company.
- Shenton, A. K. (2004). Strategies for ensuring trustworthiness in qualitative research projects. *Education for Information*, 22, 63-75.
- Sherraden, M. (2005). *Inclusion in the American dream*. New York, NY. Oxford University Press.
- Silva, E. B. (2005). Gender, home, and family in cultural capital theory. *British Journal of Sociology*, *56*(1), 83-103.
- Smith, J. G. (2006). Parental involvement in education among low-income families: A case study. *The School Community Journal*, *16*(1), 43-56.
- Stahl, J. L. L., Hall, B. S., & Benz, R. A. (2010). *Transient students: Addressing relocation to a new high school through group counseling*. Retrieved from http://counselingoutfitters.com/vistas/vistas10/Article_58.pdf

- Stake, R. (2005). Qualitative case studies, In N. K. Denzin & Y. S. Lincoln (Eds.) *The Sage handbook of qualitative research* (3rd ed.), Thousand Oaks, CA: Sage Publications
- St. John, E. F. (2003). Refinancing the college dream: Access, equal opportunity, and justice for taxpayers. Baltimore, MD: John Hopkins University Press.
- Stanton-Salazar, R. (2010). A social capital framework for the study of institutional agents and their role in the empowerment of low-status students and youth.

 Retrieved from Center for Urban Education University of Southern California website:
 - http://cue.usc.edu/.tools/publications/stanton_salazar_r_d_2010_a_social_capital_framework_for_the-study_of-institutional_agents_their_role.html
- Stanton-Salazar, R. (2001). Manufacturing hope and despair: The school and kin support networks of U.S.-Mexican youth. New York, NY: Teachers College Press.
- Stover, D. (2000). Schools grapple with high student mobility rates. *School Board News*, 11, 1-8.
- Strauss, A., & Corbin, J. (1998). *Basics of qualitative research: Grounded theory*procedures and techniques (2nd ed.). Sage: Newbury Park, CA
- Stufflebeam, D. L. (1971). The use of experimental design in educational evaluation. *Journal of Educational Measurement*, 8(4), 267-274.
- Stufflebeam, D. L., & Shinkfield, A. J. (2007). Evaluation theory, models & applications.

 San Francisco, CA: Jossey-Bass.
- Swail, W. S., & Perna, L. W. (2002). Pre-college outreach programs: A national

- perspective. In W. G. Tierney and L. S. Hagedorn (Eds.), *Increasing access to college: Extending possibilities for all students*. Albany, NY: SUNY Press.
- Sztompka, Piotr, (1999). *Trust: A sociological theory*. Cambridge, UK: Cambridge University Press.
- Tashakkori, A., & Teddlie, C. (1998). *Mixed methodology: Combining qualitative and quantitative approaches: Applied social research methods*. Thousand Oaks, CA: Sage Publications, Inc.
- Thernstrom A., & Thernstrom, S. (2003). *No excuses: Closing the racial gap in learning*. New York, NY: Simon and Schuster.
- Thomas Fordham Institute (2012). Student nomads: Mobility in Ohio's schools.

 Retrieved from Community Research Partners website:

 http://edex.s3-us-west-2.amaonaws.com/publication.
- Thomas, S. L., & Perna, L. W. (2004). The opportunity agenda: A reexamination of postsecondary reward and opportunity. In J. C. Smart (Ed.), *Higher education:*Handbook of theory and research (Vol, 19, pp. 43-84). Dordrecht, NL: Kluwer Academic Publishers.
- Tierney, W. G., & Venegas, K. M. (2009). Finding money on the table: Information, financial aid, and access to college. *The Journal of Higher Education*, 80(4), 363-388.
- Tierney, W. G., Corwin, Z. B., & Colyar, J. E. (2005). *Preparing for college: Nine elements of effective outreach*. Albany, NY: State University of New York Press.
- Tierney, W. G., & Hagedorn, L. S. (2002). Introduction: Cultural capital and the

- struggle for educational equity. In W. G. Tierney & L. S. Hagedorn (Eds.),

 Increasing access to college: Extending the possibilities for all students. Albany,

 NY: State University of New York Press.
- Tinto, V. (2006). Research and practice of student retention: What's next? *Journal of College Student Retention*, 8(1) 1-19.
- Torche, F. (2011). Education and the intergenerational transmission of advantage in the US. Retrieved from Stanford Center on Poverty and Inequality website http://web.stanford.edu/group/scspi/_media/working/torche/education-intergration-transmission.pdf.
- United States Census Bureau (2006). Educational Attainment in the United

 States, Retrieved from

 https://www.census.gov/hhes/socdemo/education/data/cps/2006/tables.html
- United States Department of Labor, Bureau of Labor Statistics. (2014). *Labor force*statistics from the current population survey. Retrieved from

 http://data.bls.gov/timeseries/LNS14000000
- VanTassel-Baska, J., & Feng, A. X. (2004). *Designing and utilizing evaluation for gifted program improvement*. Waco, TX: The Center for Gifted Education.
- Vespa, J., Lewis, J. M., & Kreider, R. M. (2013). *America's families and living arrangements:* 2012. Retrieved from United States Census Bureau website: http://census.gov.prod/2013pubs/p20-570.pdf
- Webb, J., Schirato, T., & Danaher, G. (2002). *Understanding Bourdieu*. Thousand Oaks, CA: Sage Publications.
- Weinstein, L. A., & Savitz-Romer, M. (2009). Planning for opportunity: Applying

- organizational and social capital theories to promote college going culture. *Educational Planning*, *I* (2), 1-11.
- Welkin, L. (2013). Who holds the keys to your box. *GROUP*, 37(2), 155-166.
- Wessel, R. D. (2011). Graduate studies awareness: A career services program. *The Career Development Quarterly*, 43(3), 296-301.
- Wheeldon, J. P., & Ahlberg, M. K. (2012). *Visualizing social science research: Maps*, *methods, and meaning*. Thousand Oaks, CA: Sage Publications Inc.
- Wildhagen, T. (2012). How teachers and schools contribute to racial differences in the realization of academic potential. *Teachers College Record*, 114, 1-27.
- Wight, V., & Chau, M. M. (2009). Basic facts about low-income children, 2008.

 Retrieved from National Center for Children in Poverty. Mailman School of Public Health, Columbia University website:

 http://hdl.handle.net/1022/AC:P8874
- Williams, D. R., & Collins, C. (2001). Racial residential segregation: A fundamental cause of racial disparities in health, *Public Health Report*, *116*(5), 404-416.
- Wimberly, G. L. & Noeth, R. J. (2004). *Schools involving parents in early postsecondary planning*. Iowa City, IA: ACT Policy Research Center.
- Wood, H. M. (2008). Beyond access: Cultural capital's increasing significance in selective college admissions. Retrieved from Wesleyan University website: http://wesscholar.wesleyan.edu/cgi/viewcontent.cgi?article=1178&content=etd_h on_theses
- Yazzie-Mintz, E (2009). Engaging the voices of students: A report on the 2007 and 2008 high school survey of student engagement. Retrieved from Center for Evaluation

- and Education Policy Indiana State University website: http://indiana.edu/~ceep/hssse/images/HSSE_2009_Report_pdf
- Zhang, Z., Zeller, N., Griffith, D.M., Williams, J., Shea, C., & Misulis, K. (2011). Using the context, input, process, and product evaluation model (CIPP) as a comprehensive framework to guide the planning, implementation, and assessment of service-learning programs. *Journal of Higher Education Outreach and Engagement*, 15(4), 57-84.
- Zhao, Y. (2009). Catching up or leading the way: American education in the age of globalization. Alexandria, VA: Association for Supervision and Curriculum.

APPENDIX A

SITE APPROVAL LETTER - SUPERINTENDENT



MR.KEVIN MURRAY, Principal MS. LICIA LENTZ, Assistant Principal MR. LaMONT LYONS, Assistant Principal MRS. MARLO ROBINSON, Assistant Principal

WOODLAND HILLS HIGH SCHOOL 2550 Greensburg Pike, Pittsburgh, PA 15221 • 412-244-1100•412-242-2344 (Fax)

Woodland Hills School District formally authorizes Jennifer Damico, a doctor student at Indiana University of Pennsylvania to conduct research at Woodland Hills High School for her study, "Breaking Down Barriers for Low Income College Bound Students: A Case Study of Five College Access Programs."

Ms. Damico may begin collecting data as of November 1^{st} , 2104 at Woodland Hills High School until her project end date of March 1^{st} , 2015. She will conduct a survey with teachers and administrators willing to participate as well as observe and interview grant funded college access advisors who agree to be part of the study.

Ms. Damico will have no interaction with students and has agreed to not interfere with daily educational activities. She has also agreed to provide the district a copy of the Indiana University of Pennsylvania IRB-approved, stamped consent document before she interacts with any teachers, administrators, and college access program advisors, and will also provide a copy of her published study.

If there are any questions, please contact my office.

Signed,

Alan N. Johnson Superintendent of Schools Woodland Hills SD 2430 Greensburg Pike Pittsburgh, PA 15221 412-731-1300 x 0183

WOODLAND HILLS SCHOOL DISTRICT IS AN EQUAL OPPORTUNITY EDUCATION EMPLOYER AND WILL NOT DISCRIMINATE

APPENDIX B

TEACHER SURVEY

Dear Woodland Hills High School Staff,

A critical component of keeping college access programs here at the high school is to evaluate their effectiveness. As a stakeholder, your perception of the impact of these programs is most important. I would be extremely appreciative if you could help me by completing both sides of this questionnaire. Confidentiality is guaranteed. Please do not write your name so your answers will remain anonymous. Once completed, please place your survey in the box in the front of the room.

Thank you very much for your help in this data collection process.

Jen Damico Curriculum and Instruction Doctoral Student Indiana University of Pennsylvania

***Please note that the word college applies to any post-secondary institution.

1.	□ District/High School Administrator □ High School Teacher □ Other	
2.	What is the grade level of the students you work with (please check all that apply)?	
3.	How many years have you been in the field of education? \Box 1-5 \Box 6-10 \Box 11-15 \Box 16-20 \Box 21 and above	
4.	How many years have you been at Woodland Hills? □ 1-5 □ 6-10 □ 11-15 □ 16-20 □ 21 and above	
5.	 In which department do you teach? □ English □ Math □ Science □ Social Studies □ Foreign Language 	
	□ Phys. Ed □ Family & Consumer Science □ Art □ Business & Computers	
	□ Technology Ed. □ Administrator / Not Applicable	

6	6. How familiar are you with the five college access programs at Woodland Hills?		
□ Very Familiar and utilize the services			
	☐ Familiar but do not utilize the services		
	□ Vaguely familiar but do not utilize services		
	□ Completely unfamiliar and do not know what they do		
7.	Rank the programs in order of your familiarity, 1 for most familiar and 5 for leas familiar.		
	Emerging Leaders Program		
	Independent Living Initiative		
	Penn State Upward Bound		
	Project Forward Talent Search		
	WH College & Career Access Center		
8.	Which best describes the college going culture of Woodland Hills High School?		
	Few of our high school students believe college is attainable		
	Some of our high school students believe college is attainable		
	 Most of our students believe college is attainable All of our students believe college is attainable 		
	All of our students believe college is attainable		
9.	Which best describes the faculty's attitude towards students and postsecondary plans?		
	☐ Few of our teachers believe our students can be accepted into college		
	□ Some of our teachers believe our students can be accepted into college		
	☐ Most of our teachers believe our students can be accepted into college		
	☐ All of our teachers believe our students can be accepted into college		
10.	Which statement best describes your students in regards to the SAT and ACT?		
	☐ My students often talk about the SAT or ACT and their scores		
	☐ My students sometimes talk about the SAT or ACT and their scores		
	☐ My students never talk about the SAT or ACT and their scores		
	☐ My students are freshman and unfamiliar with the SAT or ACT		
11.	. Which statement do you believe best describes your students' participation in		
11.	. Which statement do you believe best describes your students' participation in college going activities and programs like college searches, tours, fairs, etc.?		
11.			
11.	college going activities and programs like college searches, tours, fairs, etc.? ☐ My students and I always participate in college going activities ☐ My students and I sometimes participate in college going activities		
11.	college going activities and programs like college searches, tours, fairs, etc.? My students and I always participate in college going activities		

SA –	Strongly	Agree	A - Ag	ree D	Disagree	SD –Strongly Disagree
12.	I believe students.		school a	and our o	college access	programs can do more for our
		SA	A	D	SD	
13.	I know the entrance requirements for the state universities.					
		SA	A	D	SD	
14.	I believe students should start at a community college before attending a four-year college.					
		SA	A	D	SD	
15.	I believe that students should not take out loans for college.					
		SA	A	D	SD	
16.	I know whom I can speak with if I have a college related question.					
	`	SA	A	D	SD	
17.	I wish I l students.		re about	the coll	ege prep prog	grams and services available to our
		SA	A	D	SD	

Please answer questions 12-17 using:

APPENDIX C

ADVISER SURVEY

Dear College Adviser,

In an effort to best support our students and their college going dreams, I am asking that you participate in the survey questionnaire below. The survey is anonymous and confidentiality is guaranteed. Please remember to complete both sides. Upon completion, please return the survey in the envelope provided.

1.	What is the grade level of the students you work with (please check all that apply)?		
2.	How many years have you been in the field of education? \Box 1-5 \Box 6-10 \Box 11-15 \Box 16-20 \Box 21 and above		
3.	How many years have you been working with Woodland Hills students? \Box 1-5 \Box 6-10 \Box 11-15 \Box 16-20 \Box 21 and above		
4.	Rank the activities below in order of priority for your program, 1 for most important and 6 for least important.		
	Academic Interventions / Tutoring Financial aid / FAFSA Completion Assisting students with the application process Convincing students that postsecondary education is necessary and attainable SAT / ACT Registration and Preparation College / Campus Tours		
5.	What are the largest barriers your students face to gain college acceptance. Please rank 1-5.		
	Grades and Appropriate College Preparatory Classes SAT and/or ACT Scores Unmet Financial Need Fail to follow through with applications or FAFSA Parent or familial objection		
6.	Of the students you work with, what percentage matriculate into post-secondary school?		
	\square 100% -90% \qquad \square 90% - 80% \qquad \square 80%-70% \qquad \square Less than 70%		

7. What is your funding source? Please check all that apply.			
☐ Federal Government ☐ Private Institution ☐ School Dis	strict		
8. What is the duration of your grant funds?			
\Box Year to Year \Box 3-5 years \Box 5+ years			
9. Rank the contexts in which your program is implemented.			
One-on-one student meetings			
Small group meetings; group size less than 8			
Classroom student meetings, groups of 10 or more			
10. The Annual budget for your program at Woodland Hills High Scho	ol is:		
$\square < \$50,000 \square \ \$50,000-\$100,000 \square \ \$100,000-\$300,000 \square \ \$$			
, , , , , , , , , , , , , , , , , , ,	, ,		
11. Do you work with students from other high schools? □ Yes □No)		
If yes, how many other schools			
if yes, now many other sensors			
12. What are the requirements for participation in your program? Chec	k all that apply		
Student is a member of a certain racial group	at an that approx.		
Student is a member of a certain racial groupStudent is defined as a first generation college bound stud	ent		
Student is defined as a first generation conege bound student is eligible for Federal Free or Reduced Price Lunc			
Student is engine for rederal free of Reduced Frice Lunc Student's annual family income falls below a specific and	•		
Student is academically ranked in the top 25% of his or he			
Student is academically ranked below the top 25% of his	or her class		
Student's family receives public assistance			
Student lives within a particular area			
Student lives in a foster home, is a ward of the state, or is			
Student's teacher requested student's participation in program			
Student is enrolled at Woodland Hills High School			
13. Approximately, how many students are on your caseload?			
\Box Less than 50 \Box 50-100 \Box 100-200 \Box More than 200			
14. How many students on your caseload are Woodland Hills High Sch	ool students?		
\Box Less than 10 \Box 10-50 \Box 50-100 \Box 100-200	□ All		
15. How many individual contacts did you have with your Woodland H	ills High School		
students last year?	C		
□ 1-10 □ 10-50 □ 50-100 □ 100-200 □ if more than 200 h	ow many?		
	- · · · J ·		
16. Does your program follow your students through college? □Yes	□No		
If so, what percentage of your students continue after their freshman			
\square 100% -90% \square 90% - 80% \square 80%-70% \square Less than 7			
	U / U		

APPENDIX D

COLLEGE ACCESS TOOL of EVALUATION(CATE)

Participant	Date
Program Name	Length of Observation (minutes)
Number of students present	Number of students in program

DIRECTIONS

This tool is to be used to evaluate the college access adviser within the context of his or her program whose aim is to increase the number of first generation and socioeconomically disadvantaged students' matriculation into postsecondary education. Research shows that all six domains factor heavily into an adviser's and program's ability to support a student's desire to enter into postsecondary education upon high school graduation. Although all six domains are necessary for program success, all domains may not be represented during every observation period. Each domain includes component and adviser interaction indicators. The components and indicators provide the evaluator and practitioner with professional language to discuss the college access program and its adviser. In addition, the adviser interactions and indicators provide the adviser with descriptions of specific actions and behaviors necessary to lead to evidence of component indicators. The evaluator may use the space below to provide feedback and information beyond the scope of each component and indicator.

This evaluation can also be used to record the nature of the relationships between the adviser and the students he or she serves. For this section, interactions will be represented by a circle system. When observing adviser/student interaction, please use the key below:

- 0 indicates a student is present but beyond polite greetings, no interaction is taking place.
- 2 indicates a student is receiving assistance with a specific college going task.
- 3 Indicates a student is personally interacting with the adviser but not working on a specific college going task.
- 4 indicates a student is receiving assistance on a college going task and personally interacting with the adviser.

Personal interactions can be defined as interactions that go beyond cordiality, such as hello, how are you etc. Name recognition as well as interactions and discussions about classes and college, but also extracurricular activities and home life would indicate a personal relationship.

DOMAIN 1: College Going Activities & Admissions					
College Going Activities & Admissions Indicators	Adviser Interactions & Indicators				
Evidence of:	The College Adviser:				
☐ Students completing or discussing college applications,	☐ Surveys student body for interests and needs pertaining to college admissions.				
☐ Students working on more than one college application,	☐ Plans college going events that are appropriate for students' varied abilities.				
□ Students attending campus tours,	☐ Participates, plans and takes students to a college fair.				
☐ Students being accepted into one or more institutions of higher learning.	□ Provides students with current college going resources such as college view books, and other literature, college search online resources, and interactions with college admission representatives.				
	☐ Provides students with accurate answers to their college admissions questions.				
	☐ Listens to students and responds to their specific needs — activities are tailored to their needs not just program goals and outcomes.				
	☐ Is active in finding answers to student questions that he or she cannot answer.				
	☐ Has an arsenal of student relationship building strategies and can converse and work with any kind of student.				
Interactions between adviser & students (one circle represents one student)					
Ø - indicates a student is present but beyond polite greetings, no interaction is taking place.					
1 - indicates a student is receiving assistance with a specific college going task.					
2 - Indicates a student is personally interacting with the adviser but not working on a specific college going task.					
3 - indicates a student is receiving assistance on a college going task and personally interacting with the adviser.					
Total time spent with students / minutes in period:					

DOMAIN 2: Trust, Self Efficacy, & Relationships					
Trust, Self Efficacy, & Relationships Indicators	Adviser Interactions & Indicators				
Evidence of:	The College Adviser:				
 Diverse groups of students participating in college going activities, requesting counseling, and using available college going resources, Students believing college advisers treat all students equally regardless of grades or test scores, Adviser actively listening to what students say and following up when asked a question, Adviser being willing to spend extra time on a task when necessary, Adviser being reliable and keeping promises, Students believing they can be successful after high school, Students believing they can be admitted to a postsecondary institution. 	 Demonstrates sensitivity for students cultural and socioeconomic backgrounds Is physically comfortable around students and vice versa. Includes all students who are interested in participating and solicits the participation of students not yet involved. Is aware of what goes on outside of college going activities or counseling. Spends equal amounts of time with students regardless of the task. Makes all students, regardless of ability feel welcome to seek out college going counseling. Remains professional without building a barrier. Demonstrates through speech and body language a genuine interest in students' thoughts and questions. Suggests postsecondary pathways that are realistic and attainable for each specific student. 				
attainable for each specific student. Interactions between adviser & students (one circle represents one student)					
0 0 0 0 0 0 0 0 0					
Ø - indicates a student is present but beyond polite greetings, no interaction is taking place.					
1 - indicates a student is receiving assistance with a specific college going task.					
2 - Indicates a student is interacting with the adviser but not working on a specific college going task.					
3 - indicates a student is receiving assistance on a college going task and personally interacting with the adviser.					
Total time spent with students / minutes in period:					

Professional Activities & Responsibilities Indicators	College Adviser Indicators			
Evidence of:	The College Adviser:			
 □ Consistent attendance, □ Professional integrity and appropriate boundaries with students and staff, □ Cooperation and collaboration with other college access staff and programs in the school, □ Communication in a professional and timely manner with school and grant administration, □ Taking responsibility for generating program outcomes, □ Producing accurate and reliable data reports, □ Handling confidential student records ethically and responsibly, □ Collaborating and becoming involved with school staff and activities, □ Being open to suggestions from supervisors and peers, □ Expanding his or her knowledge of college access and the student population at his or her school. 	 ☐ Has a routine and system for contacting, following up, and keeping track of students in the college going process. ☐ Has a system for keeping track of outcome data. ☐ Demonstrates professionalism and cultural sensitivity when communicating with students and families. ☐ Participates in professional organizations supporting college access. ☐ Seeks out professional development opportunities. ☐ Demonstrates and embodies a passion and belief that all students need a postsecondary plan. 			
Interactions between adviser & students (one circle representations)	ents one student)			
Ø - indicates a student is present but beyond polite gr				
1 - indicates a student is receiving assistance with a specific college going task.				
2 - Indicates a student is personally interacting with the adviser but not working on a specific college going task. 3 - indicates a student is receiving assistance on a college going task and personally interacting with the adviser.				

DOMAIN 4: Academics & Testing	
Academic & Admission Testing Indicators	Adviser Interaction & Indicators
Evidence of:	The College Adviser:
☐ Students enrolling in AP classes,	□ Refers students to tutoring services when applicable.
☐ Students passing Algebra II or a higher math,	☐ Creates academic materials/curriculum for students.
□ Students graduating on time,	☐ Clearly explains SAT, ACT or PSAT Scores.
☐ Students taking the SAT,	□ Provides SAT/ACT prep opportunities.
☐ Students taking the ACT,	☐ Accurately answers grades and test score related questions.
☐ Students taking the PSAT,	☐ Asks students grade and test score related questions and
☐ Students raising their high school GPA,	offers feedback.
☐ Seniors meeting all Senior Project Deadlines,	☐ Communicates with teachers and guidance counselors.
	□ Accesses students' most current grades.
Interactions between adviser & students (one circle repre	sents one student)
Ø - indicates a student is present but beyond polite	
1 - indicates a student is receiving assistance with a s	
	the adviser but not working on a specific college going task.
5 - indicates a student is receiving assistance on a col	lege going task and personally interacting with the adviser.
Total time spent with students/ minutes in	neriod:
Total time spent with students/ minutes in	pc110u

DOMAIN 5: Building a College Going Culture					
College Going Culture Indicators	Adviser Interactions & Indicators				
Evidence of:	The College Adviser:				
☐ High school students who can list four colleges or universities,	☐ Participates in school wide and community events to advertise the possibilities of college.				
☐ Students naming a four-year college as part of their postsecondary plan,	☐ Suggests appropriate two and four year college options based on individual students' abilities and financial situations.				
☐ Senior families participating in financial aid and FAFSA completion sessions,	☐ Provides students with opportunities to meet alumni who have graduated from college				
☐ Underclassman who know their GPA and the	□ Provides faculty and administrators with college related information.				
average GPA required for most four-year	☐ Uses school building and resources to build a college going culture.				
colleges,	☐ Viewed as a trusted, consistent, and stable adult who is always positive				
☐ Students who know where to go or whom to ask college related questions,	about a student's college going abilities and makes all students feel comfortable.				
☐ Teachers and parents who believe that the majority of the students can attend college.	☐ Communicates with teachers and families about their student's college going and financial aid options.				
	☐ Is known by the faculty and staff as the school's college resource when there are college going questions.				
	☐ Communicates with administrators about evidence of college going				
	culture and barriers to a college going culture.				
Interactions between adviser & students (one of	Interactions between adviser & students (one circle represents one student)				
\emptyset - indicates a student is present but beyond polite greetings, no interaction is taking place.					
1 - indicates a student is receiving assistance with a specific college going task.					
	2 - Indicates a student is personally interacting with the adviser but not working on a specific college going task.				
5 - mulcates a student is receiving assistan	ace on a college going task and personally interacting with the adviser.				
Total time spent with students:/ minutes in Period:					

Domain 6: Financial Aid					
Financial Aid Completion Indicators	Adviser Interactions & Indicators				
Evidence of:	The College Adviser:				
 □ Students completing the FAFSA, □ Students receiving financial aid award letters, □ Students understanding financial aid, □ Students requesting financial aid assistance, □ Students completing supplementary scholarships applications. 	 ☐ Has an accurate understanding of the FAFSA process and the steps needed to complete the application. ☐ Is able to explain in a clear and concise manner the importance of completing the FAFSA to parents and students. ☐ Provides students and parents with FAFSA and financial aid literature. ☐ Is aware of and knows how to access other forms of financial aid such as grants, scholarships, direct loans, and work study. ☐ Accurately and clearly explains a student's EFC and the grants and monies available to him or her. ☐ Accurately and clearly explains students' financial aid award letters and assists students in comparing offers. 				
Interactions between adviser & students (one circle represents one student)					
Ø - indicates a student is present but beyond polite greetings, no interaction is taking place. 1 - indicates a student is receiving assistance with a specific college going task. 2 - Indicates a student is personally interacting with the adviser but not working on a specific college going task. 3 - indicates a student is receiving assistance on a college going task and personally interacting with the adviser.					
Total time spent with students / minutes in period:					

Possible Numerical Data – If Available

_	
	□ Percentage of students enrolled in Advanced Placement classes,
	□ Percentage of students who passed or are passing Algebra II,
	□ Percentage of students graduating on time,
	□ Percentage of students taking the SAT,
	□ Percentage of students taking the ACT.
	☐ Percentage of students taking the PSAT,
	□ Average high school GPA ,
	□ Number of students completing college applications,
	□ Average number of applications per student,
	□ Percentage of students participating in campus tours,
	□ Percentage of students accepted into at least one institution of higher education,
	□ Percentage of students who can list four colleges or universities,
	□ Percentage of students who name a four-year college as part of their postsecondary plan,
	☐ Percentage of senior families participating in financial aid and FAFSA completion sessions,
	☐ Percentage of underclassman who know their GPA and the average GPA required for a four-year college,
	□ Percentage of students who know where to go or whom to ask college related questions,
	☐ Percentage of teachers and parents who believe that the majority of the students can attend college,
	□ Percentage of sub groups that participate in college going activities, request counseling, and use available college
	going resources,
	□ Number of students who completed the FAFSA,
	□ Number of students who received financial aid award letters,
ļ	□ Number of students requesting financial aid assistance.

CATE Summary Page

College Access Adviser		Date:		
Program Name:		Number of students in program		
	Overall Rating for Ea	ch Domain		
Going Activities	& Admissions			
Proficient	Needs Improvement	Does Not Meet Standards		
elf-Efficacy. & Re	elationships			
•	-	Does Not Meet Standards		
onal Activities an	d Responsibilities			
Proficient	Needs Improvement	Does Not Meet Standards		
ics & Testing				
Proficient	Needs Improvement	Does Not Meet Standards		
a College Going	Culture			
		Does Not Meet Standards		
l Aid				
Proficient	Needs Improvement	Does Not Meet Standards		
Proficient	Needs Improvement	Does Not Meet Standards		
	Going Activities Proficient elf-Efficacy, & Re Proficient onal Activities an Proficient ics & Testing Proficient a College Going Proficient	Overall Rating for Each Going Activities & Admissions Proficient Needs Improvement Proficient Needs Improvement A College Going Culture Proficient Needs Improvement Needs Imp	Overall Rating for Each Domain Going Activities & Admissions Proficient Needs Improvement Does Not Meet Standards elf-Efficacy, & Relationships Proficient Needs Improvement Does Not Meet Standards onal Activities and Responsibilities Proficient Needs Improvement Does Not Meet Standards ics & Testing Proficient Needs Improvement Does Not Meet Standards a College Going Culture Proficient Needs Improvement Does Not Meet Standards 1 Aid Proficient Needs Improvement Does Not Meet Standards 1 Aid Proficient Needs Improvement Does Not Meet Standards	

	Evaluator's Overall Comments		
)	Adviser's Overall Comments		
	Evaluator Signature	Date:	
	Adviser's Signature	Date:	

By signing, the evaluator is agreeing to keep the evaluation confidential and the counselor acknowledges that he or she has seen and discussed the evaluation with the evaluator.

APPENDIX E

INFORMED CONSENT FORM



Professional Studies in Education Department

303 Davis Hall Indiana, Pennsylvania 15705 **724**/3**57-2400**

BREAKING DOWN BARRIERS FOR LOW INCOME AND FIRST GENERATION COLLEGE BOUND STUDENTS: A CASESTUDY OF FIVE COLLEGE ACCESS PROGRAMS

Primary Researcher: Jennifer J. Damico Indiana University of Pennsylvania Indiana, PA 15705

Phone: 412-303-1962

Dissertation Chair: Dr. George Bieger Indiana University of Pennsylvania Indiana, PA 15705 Phone: 724-357-3285

Consent for Participation in Interview Research

Thank you for agreeing to participate in a research study about college access programs servicing Woodland Hills High School students. You were chosen to participate in this study because of your experience as a college access adviser. The following information is provided so that you can make an informed decision whether or not to participate in this interview. If you have any questions please do not hesitate to ask the researcher or contact her later using the information provided below.

The purpose of this study is to learn the components and best practices that lead first generation and/or socioeconomically disadvantaged to students to apply, be accepted, and matriculate into postsecondary education. As a participant, you will partake in a semi-structured interview that will take approximately 30-40 minutes of your time. Participation or non-participation will not affect you in any way. During the interview, you will be asked questions pertaining to your thoughts and expertise about working with first generation and socioeconomically disadvantaged college bound students. Your responses will be digitally recorded while the interviewer will take hand written notes. If you feel uncomfortable in any way during the interview session, you have the right to decline to answer any question or end the interview. The interview questions ask you to discuss your professional practices and relationships with college bound students, however, there are no known risks or discomforts associated with this research. The information gained from this study will help to understand better the practices and program components that lead to college matriculation.

Your participation in this study is completely voluntary. You are free to decide not to participate in this study or to withdraw at any time during or after the interview without adversely affecting your relationship with the researcher. You can easily withdraw from the study by contacting the researcher at any time. Upon your request to cease participation, all information pertaining to you will be destroyed. If you do choose to participate, all information will be held in strict confidence. The researcher will not identify you or your respective program by name in any reports using information obtained from this interview, and your confidentiality as a participant in this study will remain secure. To preserve confidentiality, you and your program will be given a pseudonym, which will be used, instead of your name and your program's name when referencing comments made by you during the interview. Other self identifying information will also be changed to protect your identity. The information gathered in this study may be published in academic journals or presented at academic conferences, but your identity will always remain strictly confidential.

If you are willing to participate in this study, please sign the statement below and give it to the researcher. Please take the extra unsigned copy with you.

THIS PROJECT HAS BEEN APPROVED BY THE INDIANA UNIVERSITY OF PENNSYLVANIA INSTITUTIONAL REVIEW BOARD FOR THE PROTECTION OF HUMAN SUBJECTSD (PHONE 724-357-7730)

VOLUNTARY CONSENT FORM:

I have read the information on the consent form and I am willing to participate in

Interviewer Signature _____

APPENDIX F

ORIGINAL COLLEGE ACCESS TOOL OF EVALUATION

Project GRAD USA

Graduation Really Achieves Dreams

COLLEGE ACCESS CENTER PROGRAM EVALUATION FORM

District Name	School Name	Evaluator	Date / Length of Visit	
Staff Present	Last Name	First Name	Position of Employee	
Staff Present:	Last Name	First Name	Position of Employee	

DIRECTIONS: This form is to be used to evaluate the implementation of the mission of the Project Grad USA National College Readiness Initiative in a high school setting. All four domains should be assessed and evidence should be provided for each of the components. The domains and components will provide the evaluator and practitioner with professional language to discuss the college access center. There is a space below for the evaluator to provide written feedback that goes beyond the scope of each component. All present staff members and the evaluator should sign the finished evaluation. A copy should be provided to each staff member as well as the building principal.

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DOMAIN 1: Managing a College Access Center

The College Access Center is:

- Providing information and guidelines of the college going process
- Providing support throughout the college going process
- Coordinating opportunities to learn about colleges and careers through workshops, forums, fairs, and tours
- Providing resources and support beyond those of the high school or school district
- Tracking, assessing, and reflecting on best practices for student support
- Participating in professional development conferences and activities provided by colleges, universities, and other educational institutions.

Sources of Evidence - (Discuss in detail in the box below)

Worksheets for tracking college application process, financial aid, and workshops
Correspondence between staff, administrators, and counselors
Literature on colleges, financial aid, and other approved post-secondary institutions
College Access Displays
Assessments from workshops, forums, fairs, and tours
Professional Development documents
Information about students and where they are in the college going process
Other

Discussion of Domain 1

DOMAIN 3: Establishing a College Going Culture

The College Access Center is:

- Providing an open and safe environment of respect and rapport with students
- Establishing caring and credible relationships with students through senior interviews and checkups throughout the year
- Seeking out reluctant college going students through classroom presentations and materials
- Reminding students of current and past student successes by displaying acceptance letters, scholarship awards, and alumni accolades
- Communicating and sharing ideas and information with teachers, administrators, and counselors

Sources of Evidence (Discuss in o	detail in t	the box below)

□ Instructional resources/materials/technology for classroom presentations
 □ Student acceptance/financial aid award letters
 □ Schedule for classroom presentations and senior interviews
 □ Observations of staff interacting with students (if applicable)
 □ Senior interview sheets/electronic data
 □ College Access Center displays highlighting current and past students
 □ Correspondence between staff, teachers, administrators, & counselors
 □ Other

Discussion of Domain 3

DOMAIN 4: Parent & Community Engagement

The College Access Center is:

- Coordinating services with other organizations inside and outside of the school
- Providing resources and support to parents about the college going process through phone calls, advertisements, website postings, and mailings
- Providing "Parent University" hands-on workshops in the areas of college access and academic support
- Participating in and being visible at after school and community functions
- Showing respect for parents and guardians who are new to the college going experience

APPENDIX G

TYPOLOGY

	Access Now	Next Step	Full Speed Ahead	Leaders of Tomorrow	Pathways to Success
Largest barriers faced by the students	Grades Appropriate College Preparatory classes SAT/ACT Scores Failed to follow through with application or FAFSA <\$50,000	Grades & Appropriate College Preparatory classes SAT/ACT Scores Unmet Financial Aid	Failed to follow through with applications or the FAFSA Unmet financial need Parent of familial obligation	Grades and appropriate college preparatory classes Unmet financial need Parent or familial obligation	Grades and appropriate college preparatory classes SAT/ACT scores Unmet financial need
Budget Implementati on context	Classroom student meetings, group of 10 or more (library/ college access center)	One-on-One student meetings (center)	One on One student meetings (center/ library)	\$100,000 One-on-one student meetings (center/ library)	\$100,000 One-on-one student meetings (Center/ Library)
Grade level and context of implementati on	11 & 12	9-12	7-12	9-12	12
Components of the program	Convincing students that postsecondary education is necessary and attainable College / Campus Tours Assisting students with the application process Financial Aid / FAFSA completion Academic Interventions / Tutoring SAT / ACT Registration	Academic Interventions / Tutoring Convincing students that postsecondary education is necessary and attainable Assisting students with the application process Financial Aid / FAFSA completion SAT/ACT Registration College / Campus Tours	Convincing students that postsecondary education is necessary and attainable Assisting students with the application process Financial Aid / FAFSA completion SAT/ACT registration College / Campus Tours Academic interventions / tutoring	Convincing students that postsecondary education is necessary and attainable Academic interventions / tutoring SAT/ACT registration and preparation Assisting students with the application process Financial aid / FAFSA completion College / Campus Tours	Convincing students that postsecondary education is necessary and attainable Assisting students with the application process Financial aid / FAFSA completion SAT/ACT registration College/Campu s Tours Academic interventions / tutoring

Requirements	Student is	Student must	Student is	Student is	Student's
for	academically	be enrolled at	defined as a	defined as a	annual income
participation	ranked at the	participating	first	first generation	falls below a
	top 25% of his	high school	generation	college bound	specific amount
	or her class		college bound	student	of money
			student	Student is	Student must be
			Student is	eligible for	enrolled at
			eligible for	Free or	participating
			Federal Free	Reduced Price	high school
			or Reduced	Lunch	student
			Price Lunch	Program	
			Program	Student's	
			Student must	annual family	
			be enrolled at	income falls below a	
			participating high school	specific	
			nigh school	amount of	
				money	
				Student must	
				be enrolled at	
				participating	
				high school	
Financial	Private	School	Federal	Federal	Federal
support for	Institution	District	Government	Government	Government
the program		Private		Private	
D .: C	X7 . X7	Institution	2.5.11	Institution	2.5
Duration of	Year to Year	Year to Year	3-5 Years	3-5 years	3-5 years
funding Number of	1-10	8,000 +	2064	10-50	280
contacts	1-10	0,000	2004	10-30	200
Number of	50-100 students	More than	More than 200	50-100	Less than 50
students on		200			students
caseload					
Number of	Less than 10	All	100-200	10-50	10-50
participating					
high school's					
Students on					
Caseload Number of	0-5	50-100	10-20	10-20	0-5
contacts per	0-3	50-100	10-20	10-20	0-3
week with					
Woodland					
Hills Students					
Years in	6-10	21 & Above	21 and above	1-5 years	1-5 years
Education				,	
Years with	6-10	6-10	6-10	1-5 years	1-5 years
Woodland				-	-
Hills Students					
Percentage	90-80%	90-80%	90-80%	100-90%	80-70%
who go to					
college					
Tracking	Yes	No	No	Yes	No
Retention	100%-90%		200	100-90%	

APPENDIX H

NEEDS ASSESSMENT

Individual Service Plan

Name:	Phone:
Email:	Site:

Planning For Your Future

Please check the <u>5 items</u> that you feel would be MOST beneficial to cover:

Identifying Personal Strengths	Leadership Development
Choosing an Institute of Higher	Resumes and Cover Letters
Learning	
Interview Skills	Finding and Obtaining Work
Lecture Taking Strategies	Academic Aspects of Higher
	Education
Financial Aid and Scholarships	Identifying Job Scams
How to Apply to College	Etiquette/Professionalism
Choosing a Course of Study	Communication Skills
Financial Literacy	Time Management/Prioritization
Technological Literacy	Use of Public Resources

In the next 5 years, what do you hope to achieve?

Please check YES or NO to the following:	YES	NO
Earn a high school diploma		
Attend college/trade school		
Earn a college/trade school diploma		
Enlist in a branch of the military		
Secure a part-time job		
Secure a full-time job		
Live in your own apartment		
Buy your own car		

What is Year?	a goal that you want to have completed by the end of Senior
Why is	this goal important to you?
	nallenges will you face in achieving this goal? How will you ne them? What resources can you use to accomplish this goal
Identif	the steps you need to take to achieve your goal:
1	
2	Completed: Date:
·	Completed: Date:
3	
	Completed: Date:
l	
	Completed: Date:
5	
	Completed: Date:

What is	a goal that you want	to work on after graduation?
Why is	this goal important to	. vov.9
	this goal important to	you:
		e in achieving this goal? How will you arces can you use to accomplish this goal?
Identify	the steps you need to	take to achieve your goal:
1		
2.	Completed:	Date:
3	_	Date:
4.		Date:
-	Completed:	Date:
5	Completed:	Date:

"Going to College" Checklist

Make sure to keep up your senior year grades! Schools continually check them! If you let them fall off then you are at risk of losing any scholarships they could award you or even your acceptance!

Task	✓	Date
Took your SAT tests		
Researched different job fields		
Chose a major (this can be changed at any time)		
Researched different types of colleges		
Toured college campuses		
Applied to colleges		
Have the Guidance Office send out your transcripts to the colleges you applied to		
Chose the school you want to attend		
Applied for scholarships		
Filled out your FAFSA and PHEAA applications		
Attended orientation and paid deposits		

"Going to Work" Checklist

As with deadlines for assignments in school, deadlines for applications are incredibly important! If all parts of the application are not completed and submitted by the due date, most employers will not consider your application!

Task	✓	Date
Researched different career fields		
Researched jobs in the desired career field		
Created a resume for the desired job		
Created a cover letter for each job		
Created a LinkedIn account		
Attended ELP mock interviews		
Found job application requirements & deadlines		
Filled out job applications		

"Going to the Military" Checklist

Remember, the ASVAB can only be taken twice, so be sure to prepare for it. The branch of the military you are eligible to join is dependent upon your score on the test!

Task	✓	Date
Researched the different branches of the military		
Researched jobs offered by that branch		
Spoke to a recruiter		
Taken the ASVAB practice tests online		
Scheduled & taken ASVAB tests		

Curriculum 2014-15

Unit	Met Expectations
1 – Your Interests and Options	
2 – Finding Your Career Field	
3 –Life After Graduation	
4 – How to Fill Out College and Job Applications	
5 – How to Pay for Your Big Plans (School)	
6 – Professional Development (Resume, CL, Interview)	
7 – Technical and Financial Literacy	

APPENDIX I

TRANSCRIPT REQUEST FORM

College Application Checklist

1.) Make certain that the hard copy application is completed and signed If you completed the form electronically, have the "Your application is submitted" page printed out and in hand.	
2.) Your green Release of Records form is signed by your parents. (you only need to do this once)	
3.) You have your College Application Essay completed and proofread by an English teacher at least once.	
4.) You have a printed out of your Resume to submit colleges.	
5.) You have an appropriate sized envelope with the college's Admissions Office address on it and 3-4 stamps with you.	
6.) You have indicated on a post-it note which letters of recommendation you would like to be submitted to the College/University (if any are required). Make certain your letters of recommendation are on file in Guidance.	
	t