A Mixed Method Study of the Effectiveness of Gaining Early Awareness and Readiness for Undergraduate Programs (GEAR UP) Federal Incentive Program in Southern Mississippi Public Secondary Schools

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A MIXED METHODS STUDY OF THE EFFECTIVENESS OF GAINING EARLY AWARENESS AND READINESS FOR UNDERGRADUATE PROGRAMS (GEAR UP) FEDERAL INCENTIVE PROGRAM IN SOUTHERN MISSISSIPPI PUBLIC SECONDARY SCHOOLS

by

David Micah Maxwell

Abstract of a Dissertation Submitted to the Graduate School of The University of Southern Mississippi in Partial Fulfillment of the Requirements for the Degree of Doctor of Philosophy

May 2015
ABSTRACT

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by David Micah Maxwell

May 2015

The Gaining Early Awareness for Undergraduate Programs (GEAR UP) incentive program has been in place since the late 1990s nationally. This grant, which covers a time span of six years and offers up to eighteen million dollars in federal funds, is designed to increase college readiness and decrease the dropout rate among high school students. This study examines the effectiveness of this grant in southern Mississippi for the graduating class of 2014. Utilizing both quantitative and qualitative methods to determine the effectiveness of this grant, this study draws some conclusions and recommendations for this incentive program.
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A Dissertation
Submitted to the Graduate School of The University of Southern Mississippi in Partial Fulfillment of the Requirements for the Degree of Doctor of Philosophy

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May 2015
DEDICATION

This would not have been possible without the support of my wife, Christy Maxwell, who has supported my efforts tirelessly. Always being positive when I had classes or tutoring, she never complained about the process.

This dissertation is dedicated to my daughter, Danielle Christine Sargent-Sherman. She was patient and loving from the beginning of course work through the beginning of the dissertation process. She always allowed me to work diligently and put up with all of my days and nights of classes without complaint or comment. She passed away on December 19th, 2014 from cystic fibrosis. She is missed every day.
ACKNOWLEDGMENTS

This dissertation is the culmination of three years of study while maintaining my profession as a school level administrator. I would like to acknowledge the support of the administrators of both the Pascagoula and Moss Point school districts, who have always been supportive of my educational endeavors.

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CHAPTER I
INTRODUCTION

In August of every year in Mississippi, thousands of five-year old children are unloaded out of cars and school busses across the state. They come from every home with freshly washed faces and excitement brimming from every pore. These children are the kindergarten students for the new school year, and their enthusiasm is barely contained. Although these children share the same energetic attitudes for their new adventure, many of these new learners are already behind academically and are destined to be grouped by ability level prior to entering school on the very first day (Yee, 2013, p. A1). Prior to being placed into classes, many students throughout the state are subjected to a test – either locally generated or commercially available – which determines which teacher they will be placed with and to what level they will be taught. This practice is justified by the districts utilizing ability grouping by stating that the groups are dynamic and therefore not stigmatized. Also, since the lowest groups are often populated by the low socio-economic students and not necessarily grouped along racial lines, that there is no discrimination to be considered (Yee, 2013, p. A2).

Now envision this grouping on a larger level. This same gap exists between all children of Mississippi when compared to other children throughout the United States. Mississippi is consistently at the bottom of all indicators for child health and educational readiness (O'Hare, Mather, & Dupuis, 2012). Since this relative rank has been practically unchanged over a period of years, it can be assumed that the gap is only widening for the children of Mississippi. Concentrating on bringing the lowest of these children up to a
standard on par with the rest of the nation is where programs such as Gaining Early Awareness and Readiness for Undergraduate Programs (GEAR UP) come into play.

Background

Federal involvement in the education of children began in earnest with the Brown vs. Board of Education of Topeka decision in 1954 (Brown v. Board of Education, 347 U. S. 483, 1954). Since that time, programs ranging from Head Start through Title I have been implemented in an effort to target the most at risk students of the population. This demographic is vital to the economy as increased educational levels directly impact earning potential of the students and overall monetary contributions to their community (Ward, Strambler, & Linke, 2013). Of all demographics studied, the non-Caucasian, low socio-economic status (SES) class student proved to be the most at-risk (Prince, Pepper, & Brocado, 2006). Stemming from the Roosevelt Administration and the New Deal program for America, the National Defense Education Act (NDEA) and the TRIO programs came into being. From these programs came the wide-ranging and highly comprehensive GEAR UP program (Fields, 2001). GEAR UP is a program funded through the United States Department of Education to help increase awareness and preparation for children towards postsecondary educational opportunities (Silver, 2006). Working closely with the Institutes of Higher Learning (IHL), this program specifically targets the low-income demographic in order to expose these at-risk students to increased aspirations for continuation of their education once they graduate from high school (GEAR UP Background, 2013). GEAR UP provides six-year grants to participating school districts in states that apply for the grant in order that they may provide services to middle school and high school students (Silver, 2006). A cohort group is formed and
serves to follow a class of students from the seventh grade through graduation from high school (GEAR UP Background, 2013). GEAR UP also offers scholarships to students (GEAR UP Background, 2013). By offering these opportunities, this program hopes to increase the number of students who are seeking to further their education past the secondary level (Silver, 2006). Early interventions and a scholarship component are two of the requirements that must be incorporated into any GEAR UP program (GEAR UP Background, 2013). Cabrera et al., (2006) consider GEAR UP a comprehensive intervention program. The all-encompassing nature of this program differentiates GEAR UP from previous large scale programs funded at the federal level (Cabrera et al., 2006). Since this program begins in middle school, it provides all services to assure that low-income students are prepared to attend college after graduation from high school (Silver, 2006). Included in this program are specialized counselors, referred to as pre-collegiate advisors or college coaches. Pre-collegiate advisors (PCA’s) are vital to the success of this program since they are dedicated counselors for a specific cohort of students (Cabrera et al., 2006). These individuals serve as another school counselor for participants, and assure they are motivated to progress in school and informed about the path they will take into college (Gullatt & Jan, 2003).

Statement of the Problem

With eighteen million dollars available over a six year period, the GEAR UP program is an extremely extensive and widely encompassing program. Targeting the most vulnerable students in the state with college visits, tutoring, ACT preparation and scholarships, this program is intended to decrease dropout rates of at-risk students while simultaneously increasing their readiness for college. With such a large financial
investment going to specific districts, it is vital that this program be analyzed with regard
to its effectiveness prior to being implemented in the future. Specifically, is this program
effective in reducing dropout rate? Is this program effective in preparing students for
college? Is the GEAR UP initiative perceived as an effective program by the users of the
funds? This study examined these questions in three participating school districts on the
Mississippi Gulf Coast and provides some evidence as to the effectiveness of the stated
objectives.

Purpose of the Study

The purpose of this study is to analyze the data available over the past six years of
the GEAR UP grant in three school districts in Southern Mississippi. This analysis
focused on the areas of dropout rate, college readiness as determined by ACT scores, and
perceptions of the program from the point of view of the program administrators and
teachers of the cohort students. These factors were compared to the cohort class
immediately preceding the GEAR UP cohort in the same school. By utilizing students
from the same school, the demographic, geographic, and socio-economic factors should
remain as close as possible between the two groups. Additionally, by utilizing the
students at the same school, the teachers of the GEAR UP students and the remainder of
the cohort groups in the school remained as constant as annual staff turnover permitted.
This added benefit contributed to the accuracy and validity of the study, in that the
teachers experienced students from both the treated (cohort receiving funds) and non-
treated (cohort group immediately preceding cohort receiving funds) groups.
Research Questions

Questions concerning the effectiveness of this federal program were asked and from those questions, hypotheses were generated where appropriate and where statistical testing can be performed. For the other research questions, qualitative analyses techniques will be used. Since these questions were analyzed qualitatively, formal hypotheses will not be listed. For the research question, "Does GEAR UP decrease dropout rate?" the following hypothesis is generated:

H_1: There is a statistically significant decrease in dropout rate between students in the GEAR UP cohort as compared to the non-GEAR UP cohort.

"Are GEAR UP cohort students more prepared to enter college life than other students who did not receive services from this grant?"

H_2: There is a statistically significant increase in college readiness as measured by ACT scores in the GEAR UP cohort students when compared to the non-cohort students.

Other questions that are of interest to the researcher are "Do teachers feel that the focus of this program was beneficial? Do the teachers perceive that this program was effective for their students that they taught? What is the perception of the GEAR UP program from the standpoint of the district-level and school-level program administrator?" and finally, "What do School-level and District-level administrators believe about the effectiveness of the program and its benefit in reducing dropout rates?"
A questionnaire was distributed to participating school districts for the first three questions posed above, and interviews were conducted for the final research question. Qualitative techniques will be used to analyze the final research question.
Definition of Terms

Definitions are provided below to ensure that clarity is maintained for the readers of this study.

*American College Test (ACT)* assesses students’ general educational development and their ability to complete college-level work (ACT, 2004).

*ACT EXPLORE* is an educational assessment students usually take in eighth grade. It includes four multiple-choice tests; English, Math, Science, and Reading (ACT, 2004).

*ACT PLAN* is an educational assessment students usually take in tenth grade. It is a strong predictor of success on the ACT (ACT, 2004).

*Cohort* is a group of individuals having a common statistical factor (such as age or class membership) in a demographic study (Merriam-Webster's Online Dictionary, 2014).

*College Readiness* is the level of achievement a student needs to be ready to enroll and succeed without remediation in credit-bearing first-year postsecondary courses (ACT, 2008).

*Curriculum* is courses offered by an educational institution (Merriam-Webster's Online Dictionary, 2014).

*Dropout* is one who abandons an attempt, activity, or chosen pathway; one who drops out of school (Merriam-Webster's Online Dictionary, 2014).

*First-generation student* is a student who is the first in their immediate family to attend a postsecondary institution (Mississippi Institutions of Higher Learning, 2012).
Free and reduced lunch is a federally-assisted meal program operating in public, nonprofit private schools, and residential child care institutions. It provides nutritionally balanced, low-cost or free lunches to children each school day (U. S. Department of Agriculture, 2014).

Low-Income Schools are schools where more than 50% of students in a school district receive free or reduced lunch (U. S. Department of Education, 2003).

Title I Schools are schools that receive federal funds based on the number of students who receive free and reduced lunch. For an entire school to qualify for Title I, at least 40% of the students must be enrolled in the free or reduced lunch program (Mississippi Department of Education, 2014).

Delimitations

This study is delimited to the geographic area of two coastal counties of Mississippi. These counties are Jackson and Harrison counties. These counties are further delimited by the participation in the GEAR UP program for the class of 2014 cohort group. Since all three of these districts began the program in 2008 and the cohort group graduated in May of 2014, these school districts were selected for this study.

Questionnaires were only distributed and filled out by teachers who have had interaction with both the treated and non treated cohorts in their respective schools.

Interviews were conducted with the current administrators of the GEAR UP grant program in the district. If the PCA or college coach or teacher administrator has been replaced or resigned over the course of the grant, their input was only solicited if they were located and consented to be interviewed.
Limitations

This study was delimited to Jackson and Harrison County schools in southern Mississippi. Although these districts are similar in their demographics, they are not representative of the state as a whole. GEAR UP is a national program. Results of this study are not applicable to other states or regions, as the geographic, cultural, and demographic differences would cause problems in the comparative process.

College preparedness is measured only by ACT scores. Since ACT scores are only available to schools if the student so designates when they are administered the exam, if participating students do not select the parent school as a receiver of the scores, then the score of that student was not available.

For the dropout data it is noted that if a student transfers to another district and fails to report which district they enroll in subsequently to the departing school, then that student is considered a dropout. Also, dropout rates are determined by MSIS numbers of the students entering the ninth grade during the third year of the grant. Only those students will be counted in dropout rate, even if other students transfer in to the district and receive services through GEAR UP.

Randomization is not present in this study. Schools were chosen because of their participation in the GEAR UP initiative.

Assumptions

GEAR UP is a federal grant which has certain guidelines in place. It was assumed that the proscribed guidelines were followed and that documentation to this end can be provided. Additionally, it was assumed that all participating schools followed all
of the requirements set forth by the GEAR UP administrators, and all funds dispersed were used directly by the students in the GEAR UP cohort.

It was also assumed that only students who were in the cohort group were offered services and allowances from this grant, that all schools participating kept accurate and timely data on every student, and that records and MSIS data are accurate and up to date.

Participating schools were assumed to be utilizing similar techniques and proven interventions to assist the academic performance of the GEAR UP cohort. These techniques were assumed to include activities and interventions which have been shown to be effective by studies or data.

Justification for the Study

In this era of increased scrutiny as to the uses of public funds for educational uses, federal programs such as the long-running preschool program Head Start, which concentrates on early education of low SES children prior to kindergarten, are having to justify all expenditures and reapply for funding on an annual basis (Samuels, 2013). Similar demands by the public and legislatures enacting laws requiring accountability are the driving force behind this study as the taxpayers and district administrators’ need to assess the effectiveness of wide-ranging and heavily funded federal programs. Since the enactment of the No Child Left Behind Act in 2001 (No Child Left Behind [NCLB], 2002), a great deal of publicity and criticism have been focused on the effectiveness of public education. In the highly technical society of the twenty-first century, there seems to exist an ‘immediate gratification’ mentality by the taxpaying public which demands immediate results from any outlay of public funds. Programs which promise quick results may be more likely to be funded than those which promise results over time.
Grants and specialized funding opportunities which are originated by the federal government are often politically motivated and may be used to garner favor of the voting public. Often, programs in public education are instituted and left to flounder, with no system of checks and balances which analyze the effectiveness and the associated expense. This study will add to the general knowledge base by analyzing the effectiveness of the GEAR UP program in a state which is consistently at the bottom of national ratings for education. This research study strives to assist in determining a path which future programs similar in scope and funding to GEAR UP, or even another cohort funded by GEAR UP, will follow. Having a program which outlays a significant amount of public funds can be extremely beneficial to the student population of the state in which it is enacted if the funds are used in a wise and fiscally responsible manner. Once enacted, it seems logical that all programs should be analyzed as to their effectiveness to ensure that the program is accomplishing the goals that it was designed to meet.

Studying the effectiveness of programs designed by the federal government has a long history. Beginning with the *Brown* case in 1954 (*Brown v. Board of Education*, 347 U. S. 483, 1954), the federal government began to take an active role in the education of children. In this ruling, separate schools designed for children of different races were deemed unconstitutional and state laws which mandated this segregation were no longer allowed to be enforced (*Brown v. Board of Education*, 347 U. S. 483, 1954). This case was significant because it marked the first instance of the United States government taking a direct role in the daily operations of the states (Darling-Hammond, 2007).

Following closely on this legislation was the National Defense Education Act (NDEA) of 1958. This Act provided funds to public institutions of higher learning so
that they in turn could provide low-interest loans to students. Instituted primarily to
advance education in the areas of science, mathematics, and modern foreign languages
this Act made it possible for large numbers of the population to enter college and attain a
higher level of education (Giroux, 1984). This Act also was designed to fund subjects
ranging from English as a second language, counseling and guidance, school libraries and
librarianship, and educational media centers (Urban & Wagoner, 2004). Although far
reaching in its impact for the states, this Act contains prohibitions for federal direction,
supervision, and control over the curriculum, program of instruction, administration, and
personnel of any public institution of higher learning (Lee, 2008).

The positive effect of both the *Brown* case ruling and the NDEA has been proven
through the test of time, by enabling scores of students to achieve their goals of higher
education. The same cannot be stated for more modern educational reforms such as the
No Child Left Behind Act of 2001 (No Child Left Behind [NCLB], 2002), as this
legislation has been criticized since its inception and has failed to produce the goals of
the original law (Webley, 2012).
CHAPTER II

REVIEW OF LITERATURE

Few political topics brought up in the United States today elicit more heated debate than that of public education and the proper way to bring the nation back to the international forefront for educational excellence, particularly in the areas of mathematics and science. Too often scenes of dilapidated schools, unruly children, and apathetic teachers inundate the media and color public opinion as to the state of this vital responsibility to the youth of the nation (Grimard & Maddaus, 2004). Education of the general populace is the responsibility of the individual states as prescribed by the Constitution, and not under the guidance of the federal government (Lee, 2008). This being the case, it should be surprising that there are so many federal mandates with regard to public education. New measures of accountability for public schools as mandated by the federal government are newsworthy stories which are nationally reported. One of the most recent and heavily funded measures taken to improve education has been the Gaining Early Awareness and Readiness for Undergraduate Programs (GEAR UP) initiative, which is an extension of the Higher Education Act (HEA) of 1965 (Deil-Amen, Prabhu, Terenzini, & Cabrera, 2005). The first GEAR UP program was authorized in 1998 (GEAR UP Background, 2013). Although this program has been in place for over a decade, there have been few studies which have been conducted to measure the effectiveness of this program. Before this particular program is discussed, it is important to understand the origins of federal intervention into a state responsibility.
The debate over educational improvement is not a new one. Legislative attempts to guide educational policies can be traced back as far as the well-known *Brown vs. The Board of Education of Topeka* (1954) desegregation court case. Additionally, the Elementary and Secondary Education Act of 1965 addresses educational improvement.

With the *Brown* case in 1954, the federal government began to take an active role in the education of children. In this ruling, separate schools designed for children of different races were deemed unconstitutional and state laws which mandated this segregation were no longer allowed to be enforced (*Brown v. Board of Education*, 347 U. S. 483, 1954). Prior to this ruling, states were allowed to have ‘separate but equal’ facilities and educational opportunities. The *Brown* case found that ‘separate but equal’ was unconstitutional and laws requiring segregation by race were not allowed to be enforced. This case was significant because it marked the first instance of the United States government taking a direct role in the daily operations of the states (Darling-Hammond, 2007; Lamur, 2013). Following closely on this legislation was the National Defense Education Act of 1958. This act was designed to provide monetary resources to colleges and universities for the funding of low-interest student loans for returning veterans. Concentrating on the areas of science, mathematics, and modern foreign languages this Act made it possible for large numbers of students to enter college who were not able to attend in the past (Giroux, 1984). The funding available from this Act also promoted English as a second language, counseling and guidance, school libraries and school media centers and studies in library science (Urban & Wagoner, 2004). Although far reaching in its impact for the states, this Act contains checks and balances for federal direction, supervision, and control over the curriculum, program of
instruction, administration and personnel of any learning institution, whether public schools or collegiate sites (Lee, 2008).

Education continued to be the target of federal intervention as time moved on, particularly during the Great Depression. Known as the 'father of vocational education', school superintendent and Secretary of the National Society for the Promotion of Industrial Education (Rippa, 1997) Charles Prosser proposed a new curriculum, the life adjustment curriculum, for public school students (Urban & Wagoner, 2004). This curriculum was proposed in 1945 and in effect re-wrote the history curriculum and incorporated both history and geography into a single subject referred to as ‘social studies’ (Fallace, 2011). This new approach shifted the focus more on global interactions and less on the North American, specifically the United States, view of cultures (Groutt, 2003). The goal of this shift was to provide a more encompassing view of life activities of adult society. (Fallace, 2011). The United States at the time was a rural society with pockets of industrialization, and therefore Urban and Wagoner (2004) projected that 60% of the student population would not be able to complete an academic or vocational curriculum due to the limitations of their life experiences. Prosser proposed that these 60% be provided the life adjustment curriculum which is much less focused on standard academic subjects.

After these two interventions by the federal government, the legislation concerning public education began to flourish and became almost commonplace. Next to become law was the Elementary and Secondary Education Act of 1965. This Act has been argued to be the most far-reaching legislation enacted by the federal government prior to the No Child Left Behind Act of 2001 (Perna, 2002). This act provided for the
education of children in special categories, to include gifted children as well as children from low socio-economic status (SES) families (Bryan & Chalfant, 1965; Klein, 2014). Requirements from the Elementary and Secondary Education Act of 1965 are still enforced today and have far reaching implications in the field of special education, particularly with the requirement for equal access (Bryan & Chalfant, 1965). This act not only dictated requirements for educating special populations of students, but it was the first to assign funding to the states. This funding is specifically set aside to provide education to targeted subgroups of children. Key to this Act is the provision that every child be given access to an exceptional educational experience (Campbell, Hombo, & Mazzeo, 2000).

Shifting to a more industrialized outlook and emerging from the War on Poverty waged by the Johnson administration, an early education initiative was envisioned and funded. This program is known as Head Start and was designed to bridge the gaps in early childhood education that are prevalent in low SES children. Head Start has become a major child-centered initiative that has persevered through the years and continues to be active in present day education (Klein, 2014). The initial Head Start program began in the summers of 1965 and 1966 (Klein, 2014; Ward, 2006). This initiative was designed to help children from low-income families gain the academic and social skills that children from higher SES families possessed when they entered public school (Prince et al., 2006). Concentrating on the lowest level of the poverty ladder, this program has met with varying degrees of success. Periods of marked increases in the scholastic readiness and socialization of pre-kindergarten children, interspaced with level growth for achievement or even drops in readiness have defined Head Start through the years (Klein,
2014; Lewis, 1994). Despite the spurious results, the Head Start program has survived several attempts by legislators to cut off federal funding. The Head Start program has been subjected to several examinations of data to rate effectiveness over the years (Klein, 2014). The results of these examinations show that if the programs are administered in an effective manner, then the students gain great measures of success (Lewis, 1994). If the programs are administered in a less than optimal manner, then the children are no better off academically than children with little or no early intervention (Klein, 2014; Lewis, 1994). These results have not prevented the Head Start program from being funded, despite efforts put forward to discontinue the program.

In 1980, the United States Department of Education (USDOE) was established and the commissioner of this department was appointed as a federal cabinet-level position. Duties of the USDOE are guided by the stated mission, "to promote student achievement and preparation for global competitiveness by fostering educational excellence and ensuring equal access" (U. S. Department of Education, 2014, p. 1). The establishment of this Department ushered in a permanent federal influence for public education (USDOE, 2014). The establishment of the USDOE allows for continuing federal oversight in the field of public education. It also administers programs that cover every area of education, ranging from preschool through postdoctoral research. This department also has a strong fiscal presence. The USDOE is responsible for overseeing the disbursement of funds to various public schools that meet certain qualifications. These qualifications include Title I, which provides funding to schools with high numbers of students from low SES families, and Title IX which attempts to ensure race and gender equity in all areas of public education (Klein, 2014). In addition to public
schools, the USDOE also administers Head Start and the GI Bill programs. The GI bill is specifically designed for students who are veterans of the United States Armed Forces. The USDOE also oversees student loans for college students. Having such wide ranging responsibilities, it is apparent why this department has an extremely large annual operational budget. With tremendous funding at its disposal, the USDOE has become "the most influential office for public education in the nation" (Aldeman, 2006). All federal education initiatives have been administered through this department since its inception.

Although programs have been mandated by the USDOE for years, the one law that has been of primary concern to educators recently has been the No Child Left Behind (NCLB) Act of 2001. This act has been at the center of controversy and debate since its initial inception (Brigham, Gustashaw, Wiley, & Bringham, 2004). By having concrete milestones to meet and goals to attain, as well as punitive measures in the event of failure, this law became the driving force in education. Enforcing strict guidelines for school accountability, teacher certification, and yearly growth in a variety of subgroups of students, this law has driven school board policy nationwide (National Center for Public Policy and Higher Education (NCPPHE), 2008). Additionally, an entire generation of teachers has been accustomed to teaching towards a specific state assessment. Some researchers have predicted that these teachers will encounter problems adjusting to methods of teaching which are not assessment driven (Lee & Croninger, 2001; Silver, 2006). Although this law has not be re-authorized as of yet, the provisions and testing requirements set forth are still in effect nationally.
Federal Programs for Higher Education

In addition to rules and regulations covering public education, the federal government has set up several programs which are aimed at the attainment of a college degree. These programs are administered by the DOE. One of the more commonplace programs in use today is the student loan program. The United States DOE supplies the funds utilized for federal student financial aid, and special funds and programs for grants and scholarships for qualifying students. This program has become so commonplace that filling out the application for federal financial assistance, commonly known as FAFSA, has become a prerequisite for most scholarship offers for graduating seniors (Jager-Hyman, 2004). Since this program was enacted, the federal role in higher education has become routine for students. Initial funding for this program came from the Higher Education Act of 1965. This law was intended “to strengthen the educational resources of our colleges and universities and to provide financial assistance for students in postsecondary and higher education” (Darling-Hammond, 2007, p. 150). The Higher Education Act increased funding from federal sources given to universities. These funds also created scholarships, gave low-interest loans for students, and established a National Teachers Corps (Bryan & Chalfant, 1965).

As the federal role in education became greater, the achievement gap between low-income students and children whose families were middle-to high-income became apparent (Tajalli & Opheim, 2004). Steps to close this gap in educational achievement led to more programs which garnered their funding from the federal government. One of these federal initiatives was specifically targeted toward disadvantaged student groups.
The Federal TRIO Programs (TRIO) are outreach and student services programs designed to identify and provide services for individuals from disadvantaged backgrounds. TRIO includes eight programs targeted to serve and assist low-income individuals, first-generation college students, and individuals with disabilities to progress through the academic pipeline from middle school to post baccalaureate programs (Deil-Amen et al., 2005, p. 1).

Central to the eight TRIO programs are the Upward Bound, Talent Search, and Student Support Services programs which deal directly with low-SES students and secondary schools (Groutt, 2003).

Upward Bound provides fundamental support to participants in their preparation for college entrance. This program is designed to serve high school students from low-income backgrounds and high school students whose parents have not attended college or hold bachelor's degrees (Groutt, 2003). The goal of Upward Bound is, "to increase the rate at which participants complete secondary education and enroll in and graduate from institutions of postsecondary education" (Grimard & Maddaus, 2004, p. 3). This program focuses on "comprehensive and cross-curricular capstone projects performed by students designed to demonstrate synthesis of learning" (Grimard & Maddaus, 2004, p. 5). Upward Bound is comprised of projects which provide academic instruction in mathematics, laboratory exercises, composition, literature, and foreign languages (USDOE, 2014). Funds are also available through Upward Bound for tutoring and counseling, mentoring and work-study programs, and programs for students with limited English proficiency (USDOE, 2014). Upward Bound also administers programs designed to assist homeless children and children who are in foster care (Hughes, 2008).
Another program within TRIO is Talent Search. Talent Search is a program designed to test students with assessments above their current grade level. This testing will assist in the identification of potentially gifted students early in their academic career, specifically targeting students from low socio-economic backgrounds (Olszewski-Kubilis & Lee, 2005). These tests include nationally normed assessments such as the widely utilized college readiness assessments American College Testing (ACT) and Scholastic Aptitude Test (SAT) (Groutt, 2003). Another component of this program is ensuring the students are appropriately placed once they are identified as gifted (Groutt, 2003). Finally, talent search provides students with the access and opportunity to participate in after school and summer enhancement activities according to the interests of the students (Olszewski-Kubilis & Lee, 2005). Participation in this program is designed to increase students' perception of their chances for success in collegiate programs (Lozano, Watt, & Huerta, 2009).

The final element of TRIO is the student support services (SSS) grant. This grant provides funds on a competitive basis for projects designed to assist students in their academic development and motivate students toward postsecondary education (USDOE, 2013). The requirements of the SSS grants include academic tutoring, advice and assistance in collegiate course selection, and assistance in completing financial aid applications (Hughes, 2008). These grants may also provide for individualized counseling for students in both personal and academic information (USDOE, 2014). All of these programs are contained in the SSS grant and derive from the TRIO initiative.

In addition to the primary programs discussed here, there are the support elements contained in the TRIO initiative. Some of these are the establishment of Educational
Opportunity Centers, Ronald E. McNair Postbaccalaureate Achievement, Training programs for federal TRIO, Upward Bound Math-Science, and Veterans Upward Bound. All of these programs are designed to assist as many students as possible and cater to their individual interests. With so many options, the aim of assisting students in continuing their education into the postsecondary level is more likely to be met.

By far the vast majority of federal programs for public school improvement focus on the economically disadvantaged children in our society (Roscigno, 1999). Stemming from the Higher Education Act of 1965, a new program was envisioned in 1998. This program, titled the Gaining Early Awareness and Readiness for Undergraduate Programs (GEAR UP), focuses on a specific cohort of students and provides financial support and guidance from the beginning of secondary school through high school graduation (Mississippi Department of Education, 2013). Striving to close the achievement gap between middle-class and low-income students in the areas of performance on test scores, graduation rate, and college enrollment, this program set out to expose children to collegiate experiences early in their academic careers (Dalpe, 2008).

Government Attempts at Educational Reform

As stated by Groutt (2003), in 1945 the GI Bill was passed in response to World War II servicemen returning to the U.S. With so many unskilled laborers returning to the work force, the threat of unemployment on a large scale loomed. In order to increase the job skill level of nearly four million servicemen, Congress provided financial support for veterans to attend schools and colleges to improve their education marketability (Kodrzycki, 2002).
During the same time period as the GI Bill was being enacted, Groutt (2003) asserted that academic curriculum was pushed aside following World War II. This standard curriculum was being dismissed in favor of an education that would prepare students for work in industry due to the demands of the newly industrialized society. It has been stated that following World War II, traditional academic education had been replaced by functional education (Urban & Wagoner, 2004). It is noted by Urban and Wagoner (2004) that “while 83.3% of high school students studied a foreign language in 1910, by 1955 that percentage had declined to 20.6%” (p. 290). Fallace (2011) asserted that many of the academic subjects were thought impractical for everyday life thus college preparatory class-enrollment declined. The ensuing debate was waged as to which direction public education should move. The collective belief was that the United States was an industrial nation, and not a nation of academics (Groutt, 2003). This meant educating students about living productively in a democratic society. The industrial view also involved students taking courses that would allow them to be contributory to society in everyday life (Fallace, 2011). As stated by Groutt (2003), after World War II, high schools continued to group students according to ability level. Students were grouped into college preparatory groups and groups designed to enter the work force. This practice has been referred to as ‘tracking.’ Due to this tracking, only a small group of students actually received an education that would be deemed college-preparatory (Fallace, 2011; Groutt, 2003).

In October 1957, the launching of the Soviet Union’s Sputnik I instigated a surge of activity in the U.S. public school system (Giroux, 1984). Since many students were tracked into workforce curriculum, the United States began to decline in the areas of high
technology and engineering (Giroux, 1984). Students were no longer being prepared for life in a highly technological world (Groutt, 2003). The 1958 National Defense Education Act (NDEA) was passed in order to increase the rigor and desirability of the science, technology, and mathematics curriculum. Some of the initiatives that followed NDEA included the school curriculum reform movement. This reform resulted in a school curriculum rich in math and science courses (Lee, 2008). To become more aggressive in providing a rigorous academic curriculum with emphasis on technically challenging courses, education scholar Jerome Bruner advocated for a more structured approach to education (Rippa, 1997). Bruner felt that not only the subjects that were offered should be modified, but the method by which those subjects were delivered. Rippa (1997) further discussed this scholar:

Influenced by the work of Piaget, Bruner and his associates proposed that learning in the classroom be structured to stimulate cognitive behavior – that is intuitive thinking and learning by discovery. This methodology, in turn, should encourage the student to formulate basic concepts and principles with minimal or no help…intellectual activity anywhere is the same, whether at the frontier of knowledge or in a third-grade classroom…the difference is in degree, not in kind. The schoolboy learning physics is a physicist, and it is easier for him to learn physics behaving like a physicist than doing something else. (pp. 267-268)

“Bruner thus provided the intellectual underpinning for a curriculum created by academic intellectuals” (Urban & Wagoner, 2004, p. 297). Due to Bruner’s approach to education, the math and science courses created in the 1950s became more participatory and innovative, and were also accompanied by history and social studies courses that
followed the same pattern. Unfortunately, in the midst of academic reform movements that were taking place throughout the United States, 60% of students were still being tracked into vocational programs and there was low academic achievement for the majority of students in U.S. schools (Baker Evaluation Research Consulting Group [BERC], 2005).

The issue of access to equal educational opportunities was never more important in U.S. politics and policies than during the 1950s through the 1970s. This level of visibility was due to the increasing attention of the public and the media on integration and equal access to public services (Journal of Blacks in Higher Education (JBHE), 1999). These years defined the height of the civil rights movement, where concern for the equal education of all students came to the forefront. These inequalities of services became the focus of school reform efforts (Campbell et al., 2000). The emergence of programs such as Title I and Compensatory Education courses were instigated by the Brown (1954) decision. Title I provides funds and educational opportunities for low-income students, and Compensatory Education courses focus instruction on lower-level academic students in order to bring them up to their age-level appropriate placement. This highly publicized legal battle sped legislative response to academic reform (Campbell et al., 2000). Chief among these legislative responses was the passing of the Title IX Act in 1972. This Act guaranteed full access to educational attainment in a safe environment, free from discrimination or harassment (Jones, 2013).

The battle against low standards of academic excellence in U.S. schools continued into the 1980s. In 1983, the National Commission of Excellence published A Nation at Risk. Through this report, the Commission made recommendations pertaining to
expectations and standards for public schools in the United States. The report stated, “We recommend that schools, colleges, and universities adopt more rigorous, measurable standards, and higher expectations for academic performance and student conduct, and that 4-year colleges and universities raise their requirements for admission” (p. 4). This Commission defined a curriculum which should be followed in order to increase academic excellence. This curriculum was referred to as the New Basics Curriculum (Urban & Wagoner, 2004). In this program of study, as defined in A Nation at Risk, students must take "four years of English, three years of math, natural science and social studies, and a half-year of computer science to be adequately prepared for college." (American Youth Policy Forum, 2001, p. 7). Additional suggestions from A Nation at Risk were recommended. These included, “two years of a foreign language and a course in the arts” (p. 9).

With the challenge of raising academic performance, the standards-based reform movement emerged as a means of increasing student achievement. In a report from the American Youth Policy Forum, “The standards movement attempted to provide a legislated means for establishing common expectations for all students and an enforceable policy for creating equitable education among diverse schools and student populations” (American Youth Policy Forum, 2001, p. 9). Despite these policies and movements, the majority of high school students were not taking sufficiently rigorous college-preparatory courses. Since a sufficient level of rigor was lacking in their secondary education, these students performed poorly on national evaluations such as the National Assessment of Educational Progress (NAEP) (Wimberly & Noeth, 2004). Most high school students were not prepared for college due to the lack of representative
college-prep courses during their high school years. Due to the fact that so many children were unprepared for the demands of college, the American Youth Policy Forum mentioned this in their report. The report stated, “High school is a pivotal institution that lays the foundation for adult participation in the American economy and society” (p. 3).

Additionally, Baker Evaluation Research Consulting Group, Inc. (BERC) (2005) reported, “Over the past two decades, the burgeoning ‘Knowledge Economy’ has transformed the skill set requirements of American workers; students now need at least two years of postsecondary education to gain access to economically viable jobs” (p. 10).

With the requirements that are now necessary to be adequately prepared for the workforce, there is the need for all students to attend a postsecondary institution after high school. These institutions may be vocationally or academically oriented, but all students must be prepared for college. For viable jobs in today's economy, postsecondary education is truly the prerequisite (BERC, 2005).

Public Education in Mississippi

As has been stated, the federal involvement in education has been ongoing for decades. Much of the emphasis for federal programs is specifically targeted toward students from the low SES group. Of all of the states in the country, Mississippi ranks in the bottom five states economically on a consistent basis. Since the greatest indicator of success for students in the public education setting is socio-economic status (De La Rosa, & Tierney, 2006), the students in public schools in Mississippi are by default at risk for failing.

Poverty affects every aspect of child development, and therefore has a significant impact on their future success in the educational setting. Children living in poor
families are more likely to have diets of lower nutritional value, higher rates of physical inactivity, and suffer more from not only treatable but also preventable conditions. According to National Center for Children in Poverty (2014), in 2004, almost one third (31%) of the children in Mississippi were living in poverty and 12% were living in extreme poverty. In addition, 26% of the children in Mississippi under age 6 were living in poor families (Ward, 2006, p. 52).

Children who are raised below poverty levels are at the greatest risk for failure. In addition to failing academic courses, the potential to become a drop out increases as well (Glennie, & Stearns, 2006). Additionally, children who never attain a high school diploma become less likely to ever attain and hold a job that offers adequate health insurance and any type of retirement (Alliance for Excellent Education, 2003). Due to this lack of medical attention and insurance, "Studies have found that children from low-income families are more likely to suffer from preventable illness, fail in school, become teenaged parents, and become involved with the justice system" (Prince et al., 2006).

All of these percentages noted above by Ward (2006) are above the national average. Since these percentages are so striking, they are noticed more by lawmakers. Not only are these factors a concern for the public at large, but they are also detrimental to the potential academic success of this particular subgroup of students. Although this particular demographic is at a significant disadvantage due to poverty, intervention programs have had success in minimizing a great deal of the adverse effects.

Longitudinal studies that have followed children through early childhood development have determined that higher quality early childhood education settings and interventions lead to better cognitive skills and social interactions,
higher graduation and employment rates and lower rates of involvement with violence and delinquency. The wellbeing and training of young children has a tremendous effect on their future academic success and as a result also affects the community where they live. (Ward, 2006, p. 56)

Not only is helping disadvantaged students the right thing to do from a social responsibility standpoint, but the potential economic impact which stands to be gained from assisting students to graduate from high school is significant. In addition to the moral reasons behind quality educational opportunities, our nation’s economic security now requires many more students to graduate from high school with marketable skills (Fallon, 1997). In the twenty-first century with its knowledge-based economy, all students need education at levels above secondary in order to be competitive in a highly technical job market (Phillips, Keselman, & Merisotis, 2006).

All of these studies serve to draw attention to not only how children can become better prepared for school prior to entering, but also how they may succeed once they are enrolled. Socio-economic level is an important predictor of educational success. Factors associated with poverty level students play into the knowledge gap which is present in the outset of formal education. Without some equalizing component, low-income students have little chance of obtaining and successfully completing a college education (Gándara, 2001).

In addition to these factors, housing and neighborhood choice has a determination upon college readiness. Since the physical location of the school is often central to specific neighborhoods and areas of the community, economic status has an effect on K-12 school choice. This is due to the fact that children from low-income neighborhoods
often attend a school located in their neighborhood (Annie Casey Foundation, 2001). For low-income, non-Caucasian students, economic status results in limited access to quality schools (Fuller, 2002). Fuller (2002) also noted that students from low-income backgrounds are often forced to attend schools which are provided fewer resources compared to schools in higher income areas. Case studies have found that schools located within a low socio-economic neighborhood do not hire and retain the most qualified teachers, or those who test highest on content certification exams (Kahlengerg, 2006). All of these factors may contribute to lower performance on state and national assessments.

Education Efforts in Mississippi

Realizing the scope of the educational crisis in the state, the Mississippi Department of Education (MDE) launched a statewide high school redesign effort in 2006. This redesign was comprised of revamped course frameworks in all of the core academic subjects (MDE, 2013). The primary goal of this redesign effort was revised science, technology, engineering, and math course standards. These new standards include assessments with an emphasis on 21st century skills, as well as alignment from academics to career pathways (MDE, 2013). The Mississippi legislature also mandated that all school districts provide at least one advanced placement (AP) course in the areas of math, English, science, and social studies (Phillips et al., 2006). Given that only 4% of all Mississippi 11th and 12th graders have taken an AP exam (American Diploma Project Network, 2008) and that ten of the lower performing school districts offer two or less AP courses, these new courses and the investment in teacher AP certification have
significantly increased the number of low-income students exposed to rigorous courses and instruction (Martinez & Klopott, 2005).

Compared to the rest of the United States, public school students from Mississippi are significantly unprepared for rigorous coursework in grades 7-12 (NCPBHE, 2008). According to the 2007 National Assessment of Educational Progress (NAEP) scores, students enter and exit middle school with serious weaknesses in foundational academic skills (NCPBHE, 2008). While nationally, 31% of 4th grade students were proficient on NAEP reading assessments, only 19% of Mississippi 4th grade students and 17% of eighth grade students were able to meet the same benchmark (Lee, Grigg, & Donahue, 2007). In mathematics, a similar trend of academic weakness existed, showing that only 21% of 4th grade students and 14% of eighth grade students in Mississippi met the NAEP benchmarks (American Diploma Project Network, 2008). For African American and low-income students, the outlook was even more discouraging (Lee et al., 2007).

The goal stated for Mississippi to meet the requirements of the No Child Left Behind Act (2001) was that all children achieve the level of Proficient. This level is defined as: “Students at the proficient level demonstrate solid academic performance and mastery of the knowledge and skills required for success in the grade or course in the content area” (p. 4). Mississippi Curriculum Test, Second Edition (MCT2), Interpretive Guide (2011) or the level of Advanced defined as: “Students at the advanced level consistently perform in a manner clearly beyond that required to be successful in the grade or course in the content area” (p. 4). MCT2 Interpretive Guide (2011, p. 4) on standardized state assessments by the year 2014.
Mississippi is a participant in the American Diploma Project. This project aims to make college and career readiness a top priority in all participating states (Achieve, 2013). This project was begun by the Achieve group based in Washington, D.C. in 2005, and now encompasses 85% of all public school students in the country (Achieve, 2013). Through this program, the minimum course requirements for high school graduation have increased significantly. Courses have also attempted to align with workforce expectations (Achieve, 2013). Beginning in 2006, college-bound students in Mississippi were exposed to the Mississippi Institution of Higher Learning College Preparatory Curriculum (CPC) which attempts to align high school exit requirements with college entrance requirements for public universities in the state (Mississippi Institution of Higher Learning, 2012). This alignment allows students to better choose their courses in high school in order to prepare for initial entrance into college (Mississippi Institutions of Higher Learning, 2012). This differs from tracking in that the students are guiding their own course selection, rather than having their program of study assigned to them.

Mississippi's CPC graduation requirements include a minimum of four units of English; three units of mathematics (Algebra I, Algebra II, and Geometry); three units of science (two must be lab-based); three units of social studies; two advanced electives (foreign language, advanced math or science); and half unit of computer applications (Mississippi Institutions of Higher Learning, 2012). Whereas the high school exit requirements for college bound students as of 2014 at a minimum are: four units of English; three units of mathematics (one must be Algebra I); three units of science (one must be Biology I); three units of social studies; four and a half units of electives; a half unit of business and technology (computer applications); a half unit of health, and one
unit of arts (MDE, 2013). According to the College Board Advocacy and Policy Center, College Completion Agenda Progress Report (Hughes, 2012), Mississippi has aligned its high school graduation requirements standards with the college entrance requirements, thus attempting to make students’ transitions from high school to college easier.

The use of Teacher Support Teams (TST) is another mandated state reform support program designed to assist educators in the remediation of their students. These teams are used to identify children who exhibit academic-risk factors such as failing grades, missing assignments and high rates of absenteeism. Once these students are identified, individualized support plans are developed so that assistance can begin before they experience chronic failure in the educational setting (MDE, 2013). In addition, the most current method for identifying at-risk students in Mississippi is the Response to Intervention (RTI) model, which is mandated by the state to be used by all public school districts. The mandate provides early intervening services ranging from hearing and eyesight screenings to direct instructional modifications that are designed to support students in the educational setting (LDonline, 2014). These interventions are designed to assist students who may experience academic or behavioral difficulties (MDE, 2013). This is a three-tier model: tier one is quality classroom instruction, tier two is focused and targeted supplemental instruction, and tier three includes intensive interventions (LDonline, 2014). Students in tier two and three should receive a minimum of thirty minutes of research-based interventions at least three times a week, outside of regular classroom instruction (MDE, 2013). Progress monitoring of these students is required to measure the success of the interventions (LDonline, 2014).
Challenges to Postsecondary Educational Access

For many students, access to postsecondary education can be difficult or impossible without outside assistance. In fact, Jager-Hyman (2004) stated:

According to the Advisory Committee on Student Financial Assistance (2002), due to the decrease in need-based grant aid and the increasing cost of college, half of qualified low-and moderate-income students—over 400,000 in total—will be unable to attend a public four-year institution due to the high cost of tuition. Additionally, of these 400,000 students, 170,000 of these students will be unable to attend a postsecondary institution. (p. 4)

Furthermore, adequate academic preparation, parental education, information on college admission, and financial aid all play a role in whether a student is prepared and able to attend college.

Many times low-income students have fewer opportunities to participate in rigorous high school courses due to tracking by their school administration (Spring, 2002). Spring (2002) documented how schools use grouping or tracking by academic ability “as a means of fostering social inequality” (p. 91). This was noted again in 2013 in an article in the New York Times (Yee, 2013). Often, low-income students are in schools that do not have the financial resources to offer coursework which would help these students prepare academically for college by challenging the students with more rigorous courses (Jager-Hyman, 2004). High school academic performance and achievement also have an effect on whether students pursue and obtain a college degree (Braxton, Brier, & Hossler, 1988). When schools with low academic rigor are located in a low socio-economic area, the challenges may increase. Silver (2006) noted that low-
income students need to be “prepared to enter and succeed in postsecondary education; this cannot be done without providing a rigorous academic curriculum.” Gándara (2001) found schools that have required students from all socio-economic backgrounds to take challenging coursework and which offered high-quality instruction were successful in preparing their students to enter and succeed in college. Silver (2006) stated, “Low-income students are less likely to be enrolled in a college-preparatory track (22% as opposed to 65% of high-income students) and more likely to be enrolled in a vocational track (22% as opposed to 3% of high-income students)” (p. 4). Echoing the same sentiment, Perna (2002), found that schools which promoted collegiate preparatory courses combined with academic excellence had greater percentages of students enroll and begin postsecondary educational facilities.

Students from low-income families, also referred to as low socio-economic status (SES) students, are less likely to complete high school, and they are less likely to attend and complete college (Tajalli & Opheim, 2004).

In sharp contrast to lowest-SES students, 59% of students from the highest SES background secured high academic resources…for them, the chances of degree completion are almost certain at 81%, compared to the 25% of the students who obtain high academic resources from the lowest SES category, only 58.5% of these students complete a four-year degree. (p. 9)

Tajalli and Opheim (2004) found that SES is an important influence on student performance, according to academic researchers in various studies. When students from low-income homes do attend college, they are more likely to drop out prior to degree completion compared to students from higher income homes (Braxton et al., 1988). The
Ed Trust Study (2004) also found that students from low-income backgrounds struggle throughout their academic career. This is partially due to low expectations from educators and less rigorous coursework. Additionally, many of these students are enrolled in schools where the teachers are not highly qualified to teach in the academic areas they are assigned (Ed Trust, 2004). Giroux (1984) stated:

> School, for many students, particularly those from the lowest socioeconomic level of society, offer few opportunities for self and social empowerment. For these students, schooling is a place that disconfirms rather than confirms their histories, experiences, and dreams. In part, this alienation is expressed in the high rate of student absenteeism and school violence, and in the refusal of many students to take seriously the academic demands and social practices of schools. (p. 189)

Pathways to College Network (2004) noted that only 28% of students from low-income homes have access to advanced and honors classes in high school. Pathways compared this statistic with the 48% of middle-income high school students and 65% of high-income high school students offered advanced and honors classes. Clearly, low-income students have fewer academic opportunities than their peers who are from higher income backgrounds.

Research also provides additional documentation showing the price of attending college is still a significant obstacle for students from low-and middle-income families (Choy, 2002). In 2001, the U.S. Bureau of the Census reported large differences in college attendance and completion based on family income.

In 2000, only 21.11% of males and 23.69% of females in families with incomes less than $20,000 were enrolled in postsecondary education or had earned a
bachelor’s degree as compared to 59.10% of males and 70.94% of females in families with incomes exceeding $75,000, who had attended post-secondary institutions or completed a bachelor’s degree. (U.S. Census Bureau, 2009, p. 3)

Familial Influences on Education

Choy (2001) found that parental education was the best predictor of whether students will attend college. Many students from low-income backgrounds may be the first from their family to attend college, and are therefore labeled as first-generation students. Choy’s research (2001) indicates that students whose parents did not attend college were less prepared to attend college compared to their non-first-generation counterparts. They also had less knowledge of how to apply for college and for financial assistance, and they appeared to have more difficulty in fitting into the climate of college once they enroll (Tym, McMillion, Barone, & Webster, 2004). College entrance procedures are not the only challenges for students braving the waters of higher education. The difficulties and intense demands of collegiate life are intimidating to the students, and totally foreign to their families. Many of these families have little or no experience with preparing for and attending college. These students may find that continuing in the lifestyle and practices that are comfortable to them are preferable to the discomfort of environmental change which college life presents (Cabrerra & LaNasa, 2000).

Since a parent’s educational background can include valuable experience in the process involved in collegiate acceptance, this becomes another important factor shaping the probability of a student attending college (Swail & Perna, 2000). Cabrerra and LaNasa (2000) found that parents who were uninformed about college and college
requirements were fearful when it came to both the application and financial aid process. This lack of familiarity with processes and procedures was found to be a deterrent to many well-qualified students (Cabrerra & LaNasa, 2000). Students whose parents did not attend college were less familiar with the requirements for college and often had incomplete information regarding the completion of the financial aid process (Swail & Perna, 2000). Many of these students whose parents did not attend college aspire to enroll in higher education, but "they often lack the information and resources necessary to facilitate this process" (Jager-Hyman, 2004, p. 4). Additionally, Orfield and Paul (1994) observed when a student's parents did not attend college the student was less likely to attend college.

All of these factors point to the conclusion that academic rigor, socio-economic background, and parent education level play a part in whether a student will attend and succeed in college. Based on the factors that influence student attendance and completion of college, pre-college outreach programs have been developed by the federal government and private organizations to assist students in preparing for college (Gullatt & Jan, 2003). Pre-college outreach programs often attempt to neutralize the factors that keep so many students out of college. These programs are intended to break the cycle of failure to attain college readiness and ascension (Gullatt & Jan, 2003).

Factors Contributing to Low College Attendance

Glennie and Stearns (2006) found that ninth graders are more likely to dropout than any other group of students. Since this finding has such a significant impact on overall graduation rates, numerous pre-collegiate outreach programs serve students from low SES backgrounds beginning at an early stage in their public education, namely high
Glennie and Stearns (2006) also found that there is a gap in high school academic achievement, persistence, college attendance, and college degree attainment for first-generation students. When viewed in comparison to income levels, ethnicities, and students' status as the first-generation to attend college from their family, this difference becomes more apparent (Glennie & Stearns, 2006). Specifically, Caucasian students achieve a higher rate of degree attainment than to their African American and Latino counterparts (Carpenter & Ramirez, 2007).

It has been indicated by research that these specific subgroups have a strong tendency to enter the work force upon graduation from high school rather than to begin collegiate course work (Carpenter & Ramirez, 2007). Nationally, students are more likely to progress toward a college degree if they enter college directly after graduating high school (Greene & Winters, 2005). It is often more difficult for students from low-income backgrounds to make this transition due to financial concerns, according to Ward (2006). In addition to the financial challenges, there are often family and community pressures – as well as cultural expectations – to begin contributing income to the home once the student completes high school, forcing some to put off college or not attend at all (Ward, 2006). Those students who wait to begin their college education may be at a disadvantage. Students who begin college immediately after high school are more likely to graduate within five years compared to students who enter with a break between high school and college (National Science Foundation, 2002). In 2006, only 55% of African American students and 58% of Latinos enrolled in college during the fall semester after spring graduation, while 69% of Caucasians progressed directly into college (USDOE, 2014).
While entering college directly is difficult for many students based on familial expectations, financial concerns, and a basic unfamiliarity with the processes involved, those who do begin right away still face significant challenges (Ward, 2006). Many students are academically unprepared to succeed in the rigorous courses faced in college (Dynarski et al., 2008). Remedial courses in college present an additional barrier to overcome, especially for students from low-income backgrounds and certain ethnicities (Schargel & Smink, 2001). The problem may be compounded by the fact that these students have to complete more courses than their counterparts who are able to start coursework at the introductory level. Only 30% of students who attend public high schools in the United States are college ready by the twelfth grade (NCPPHE, 2008). While this rate is low, it is even lower for non-Caucasian students. Only 23% of African American students and 20% of Latinos are considered college ready upon high school graduation (NCPPHE, 2008). This is compared to 40% of Caucasian in the same year group being prepared for college (Schargel & Smink, 2001). Due to this added requirement to take these remedial courses, which do not count for credit in standard degree programs, the degree sought becomes more expensive, adding to a financial burden that can seem impossible to overcome (Schargel & Smink, 2001). Finally, since these students are not academically prepared to succeed in collegiate level courses, they most likely lack the skills necessary to continue in college (NCPPHE, 2008).

Another familial factor challenging students is that parents and siblings of first-generation students do not have first-hand knowledge of the mechanics and information necessary to enroll in and succeed at a postsecondary institution (Fallon, 1997). When looking specifically at aspiring non-Caucasian college students, conversations with their
parents were less about going to college and more about getting a job after high school (Fallon, 1997). This trend spotlights a reason for difficulty encountered by first-generation students who are trying to break the pattern of not progressing past a high school education within their family. This also may explain why many low-income students choose to work after high school rather than continuing into college. Carpenter and Ramirez (2007) found that one-third of aspiring first-generation college students who gained access to college never discussed entrance exam preparation with their parents and only 42% discussed applying to college (Carpenter & Ramirez, 2007). These statistics compare dramatically to non-first generation students. Only one-fifth of students whose parents earned a college degree did not discuss college entrance exam preparation and 61% discussed applying to college with their parents (Choy, 2001). Even if low-income students had taken the same courses in high school, they would be less likely to take test prep courses that could improve their college entrance exam scores (JBHE, 1999). Low-income students also reported they cannot depend on their parents to assist them with the financial aid process, which is often essential for these students to gain access to postsecondary institutions (De La Rosa & Tierney, 2006).

It is generally accepted by colleges that another barrier for potential first-generation college students is the overall lack of rigorous academic preparation at the public school level. In one study, students from low-income non-Caucasian backgrounds who aspired to attain a four-year degree had lower scores on cognitive tests, lower grades, and earned less graduation credits in math and English compared to students from less challenged economic circumstances (Constantine, Kindaichi, & Miville, 2007). One cause of these lower scores and grades is that these students are not pushed as
consistently to succeed in their courses as their Caucasian classmates by their teachers (Constantine et al., 2007). It has also been found that Caucasian students receive more academic encouragement than non-Caucasian students (Constantine et al., 2007). Since strong teachers are necessary in creating student interest in a subject, and in instilling the relevance of education in general, then these two factors become problematic (Cabrera, Deil-Amen, Prabhu, Terenzini, Chul, & Franklin, 2003). In addition to the external factors being decreased, one study has shown that low-income, non-Caucasian students are more disengaged than Caucasian students, decreasing the intrinsic motivation. This is especially true if they do not view education as relevant to their future (Constantine et al., 2007). These reasons highlight why many low-income students do not enter college, and those that do begin college are in need of academic remediation.

Dropout Impacts

Preventing students from dropping out of public education prior to graduation from high school has gained a great deal of attention nationally, and particularly in Mississippi. The Mississippi Department of Education has offered extensive opinions and guidelines for the dropout problem in the state.

State Superintendent of Education Dr. Tom Burnham, as noted on the state Department of Education (MDE) web site, announced that Mississippi’s dropout rate for the class of 2010 is 17%. The previous year’s dropout rate was 16.8%. The graduation rate changed slightly with the current rate at 71.4%, compared to last year’s graduation rate of 71.6%. The completion rate for the class of 2010 is 78.6%, compared to the previous year’s rate of 79.3%. Students are tracked and figures are calculated through the Mississippi Student Information System, which
depends on self-reported data provided by school districts. Recently the Mississippi Department of Education (MDE), in collaboration with members of the Mississippi Legislature and the Office of State Auditor Stacey Pickering, placed more accountability on school districts to verify the data provided is accurate. (MDE, 2013, p. 3)

Annual reports on school performance and dropout rates are highly publicized by all media in the state, and businesses have been to alter plans for new construction projects based on the strength of the school district in which its employees would send their children (Grubb, 1999). In this way local economies are influenced by reports of school achievement.

Ward (2006) states, "Moving even one student from dropout status to graduate status will contribute to a state’s economic growth" (p. 50). If the data collected could be extended to one thousand students, these new graduates, combined, would likely earn $8.2 million in additional earnings in an average year; spend an additional $1 million each year purchasing vehicles and, by the time they reach the midpoint of their careers, buy homes worth $13 million more than what they would likely have spent without a diploma; and support 70 new jobs in the state, increase the gross state product by $10 million, and pour an additional $700,000 annually into state coffers, all through their increased spending and investments. (Phillips et al., 2006, p. 1)

In a time of uncertain state revenues and in the wake of a national recession that most profoundly affected those with the least education; states should be viewing education reform as a key strategy for strengthening the economy. Improving the
outcome of public education creates a wave of economic benefits that include boosting individual earnings, increased home and auto sales, higher quality jobs and economic growth (Grubb, 1999). As the general population becomes more educated, there will be an increase in spending and investment, which effects tax revenue in the state (Ward, 2006).

Investing in turning dropouts into graduates will benefit all citizens, including bankers, auto dealers, realtors, and storeowners, not simply students or parents with children in school. Nationally, more than seven thousand students become dropouts every school day, adding up to over one million students annually who will not graduate from high school with their peers. (Carpenter & Ramirez, 2007, p. 39)

Recognizing that dropouts from high school are a serious problem in the state, the MDE created an Office of Dropout Prevention in the summer of 2006 (MDE, 2014). This office developed a statewide dropout prevention plan that details several efforts to combat this crisis. MDE has three stated goals for dropout prevention in the state. Goal 1 is

To increase the graduation rate for 9-12 cohort classes on a systematic basis to 85% by the 2018-2019 school year as mandated by Mississippi Code §37-13-80. The Office of Dropout Prevention is also responsible for establishing graduation rate benchmarks for each two-year period from the 2008-2009 school year through the 2018-2019 school year, to serve as guidelines for the graduation rate increase. (MDE, 2013, p. 8)
In order to enforce and assess this goal, school districts throughout the state have been tasked with improving tracking and reporting methods to the Mississippi Student Information System (MSIS).

Improving the tracking methods will ensure that the data being reported to the state is accurate. Additionally, MDE has provided training to administrators and attendance clerks on how the cohort numbers are calculated (MDE, 2013). Goal 2 for Mississippi is "By 2012-2013, initiatives instituted by the Office of Dropout Prevention will reduce the state dropout rate by 50%" (MDE, 2013). With this document being finalized in February of 2007, current dropout rates support the fact that this goal has not been accomplished. Initiatives put in place by the MDE are reported to be actively followed by districts throughout the state, but the goal has still not been attained (American Diploma Project Network, 2008). The Mississippi Department of Dropout Prevention's Goal 3 is "By 2012-2013, initiatives instituted by the Office of Dropout Prevention will reduce the statewide truancy rate by 50%." (MDE, 2013). This goal has not been met. Although attainment of these goals has proved challenging, the state continues to work diligently to prevent students from leaving the environment of public schools (American Diploma Project Network, 2008). Two of the ongoing strategies that the state is employing are: "Implement a collection system that will allow comparable graduation and dropout data across districts over time" and "Report annual graduation and dropout rates." (MDE, 2013, Assessment). By implementing these two initiatives, the state will be able to more accurately determine if dropout prevention programs are being effective. The training provided by the state on how to properly code individual students should assist in this measure.
Continuing with outlined strategies, the state will locate all students including students with disabilities that are considered “no shows,” 15 calendar days after the first day of school, coordinate services within the MDE to increase graduation rates and decrease the number of dropouts, develop a statewide dropout prevention plan, provide technical assistance to school districts in the areas of attendance and dropout prevention, and monitor local education agencies (LEA) dropout prevention plans. (MDE, 2013, Assessment)

Finally, Mississippi will continue their dropout prevention efforts. Identification of high risk students is a priority. By continuing to:

Identify and implement best practices for identifying and monitoring all students, including students with disabilities that are “at-risk” of dropping out, coordinate services with the Department of Human Services (sanctioning Temporary Assistance for Needy Families (TANF) and associated Food Stamp cases based on a pattern of unexcused absences), ensure that all students, including students with disabilities are provided alternatives to the general education curriculum (i.e. General Educational Development (GED) Options), ensure that all school districts are in compliance with compulsory school attendance and alternative education program requirements, and ensure that school counseling programs promote school success for all students, including students with disabilities, through a focus on academic achievement, prevention and intervention activities, advocacy (Mississippi Code Annotated 1972 § 37-13-91 and 37-13-92), social/emotional issues, and career development. (MDE, 2013, Reporting)
In addition to the identification and reporting responsibilities, a comprehensive dropout prevention intervention program, referred to as Response to Intervention (RTI) that institutes Teacher Support Teams (TST) has already been instituted in the state, and districts are being held accountable for implementing this intervention program. This program is a detailed three-tiered intervention policy, and MDE has stated that it will

  Provide technical assistance to districts on the Three-Tier Instructional Intervention Policy. This process aids teachers in the development of instructional interventions that will meet the needs of all students. This process, if implemented correctly, will possibly reduce the number of students receiving special education services, provide leadership and technical assistance to local schools and districts in their efforts to provide effective educational programs to students with disabilities, ages 3-21, who are in need of special education and other services necessary to enable them to benefit from instruction as provided for in the Individuals with Disabilities Education Improvement Act and state law, promote early intervention of health services, and promote 'Healthy Schools.'

  (MDE, 2013, RTI)

This web resource and the strategies outlined are expected to be continuously implemented by the state of Mississippi.

  Dropout Prevention Programs in Mississippi

Glennie and Stearns (2006) found that ninth graders are the most likely to drop out of high school compared to all students nationwide. This pattern persists for African Americans, Latinas/os, and Native Americans, as well as for all male students in general (Lee & Croninger, 2001). Not only is the ninth grade a crucial time, but some
demographics have various rates of retention, as well. Some students, particularly African American students, drop out at a higher rate than their Caucasian counterparts (USDOE, 2014). Once the public acknowledges these statistics as facts of modern society, then the first step is taken toward addressing the problem (Darling-Hammond, 2007). In 2002, the National Center for Education Statistics published a report on the economic status of the high school dropout epidemic. In this report it was stated that if the students who dropped out of high school in the class of 2007 - nearly 15,000 in all - would have made it to graduation, "Mississippi would have realized four billion dollars in additional personal earnings. One and a half billion dollars would be realized if African American students graduated at the same rate as their Caucasian counterparts" (Alliance for Excellent Education, 2003, p. 1). Additionally, the Alliance suggests that at least 67% of high school diploma holders in Mississippi will need to attain a postsecondary credential to meet the short-term labor needs by 2015. This is true due to the fact that over the next decade, 72% of all Mississippi jobs will require an associate's degree or higher (Alliance for Excellent Education, 2003).

Dropping out of public school is not the only problem that has been identified by researchers and scholars for the state. According to a report from the American Diploma Project Network (2008), Mississippi spends $37 million on remediation at community colleges alone. Of the 65% of graduates who enroll in postsecondary education in Mississippi, 44% of those students at two-year institutions and 25% of those students at four-year institutions will not return for their sophomore year (American Diploma Project Network, 2008). Fifty-six percent of Mississippi college freshmen will complete their degree in six years, yet and only 40% of African American college students in
Mississippi will complete their degree in the same time period. For the state of Mississippi, college completion and degree attainment is low as well. Only 20% of all adults hold a bachelor's degree or higher in the 25 to 65 age range. In the public school environment, the same percentages of adults do not have a high school diploma or a comparable academic certificate (Phillips et al., 2006). At the collegiate level, the disparity in educational achievement between Caucasian and African American students is still present. National statistics state that for bachelor's degrees, only 11% of African American adults are degree holders, while 24% of Caucasian adults hold the same degree (U.S. Census Bureau, 2009). Over all, a student from Mississippi taken at random has only a 34% likelihood of enrolling in college by the age of 19 (Greene & Winters, 2005).

Taking all of these statistics into account, the state of Mississippi developed a comprehensive dropout prevention plan in 2007. This plan was designed to be utilized by all public schools in the state. This plan incorporated the 15 strategies for dropout prevention that were identified by the National Dropout Prevention Center at Clemson University in 2013. These strategies are

- Systemic renewal
- School-community collaboration
- Safe learning environments
- Family engagement
- Early childhood education
- Early literacy development
- Mentoring/tutoring
- Service-learning
- Alterative schooling
- After-school opportunities
- Professional development
- Active learning
- Educational technology
- Individualized instruction
- Career and technical education (Smink & Reimer, 2005, p. 3).

Mentoring, tutoring, service learning, after school opportunities, and alternative schooling were the basic core strategies that Mississippi’s dropout prevention plan focused on to help encourage public school completion by students (MDE, 2013). The first strategy of mentoring and peer tutoring intervention focused not only on academics but also on socialization issues (Education Commission of the States, 1998). The emphasis on socialization aspects of dropout prevention was added as a result of the Commonwealth Fund’s 1998 Survey of Adults Mentoring Young People. This survey found that eight of ten adolescents have one or more problems that could have a negative effect on their development and school success. These problems range from difficulty in reading to socialization problems with other students. The Commonwealth Fund’s survey reported the following results on mentoring programs: Self-esteem was improved in 62% of students, 52% of students were truant on a regular basis, grades improved in 48% of students, and 47% of students improved showed improved behavior in the school setting (McLearn, Colasanto, & Schoen, 1998).

Secondly, service learning has come to the forefront of Mississippi’s plan as an effective dropout prevention strategy (MDE, 2013). This strategy combines community
service with classroom learning activities (Smink & Reimer, 2005). This initiative combines the academic curriculum with classroom learning through the investigation of community problems (Bridgeland, Dilulio, & Morrison, 2006). It is theorized by the MDE that tying education to the students' community will bring a sense of concrete purpose to educational endeavors.

A third basic strategy that was adopted by the state of Mississippi to decrease the dropout rates centered on opportunities for after school activities (MDE, 2013). Many schools provide after-school programs and summer enrichment programs designed to forestall information loss, increase interest in a multiple areas, and expand the general knowledge of students (Dynarski et al., 2008). As a result of these programs, learning new material occurs all day long, every day of the year, and does not stop when school is not in session for holidays or summer breaks, this concentrated effort of after school activities has been shown to an effective strategy (Dynarski et al., 2008).

The final basic best practice strategy for dropout prevention is alternative schools (MDE, 2013). Alternative schools were designed to provide options to dropping out of school to focus on the student's social needs. Alternative schools also provide the academic requirements for attaining a high school diploma (Schargel & Smink, 2001). Adding to all these strategies was the concept that exposure to collegiate experiences may be another method of motivating students to complete their secondary schooling (De La Rosa & Tierney, 2006).

GEAR UP

Theories abound as to why racially diverse students do not attend postsecondary institutions at the same rate as their Caucasian peers. Unfortunately, even with all of the
attention to this problem, there has been little progress in closing the achievement gap
which exists between low-income and non-Caucasian public school students in the
United States and their Caucasian, upper- and middle-class counterparts in the same
schools.

There have been numerous pre-collegiate programs that were designed to address
this very problem. One such program is Gaining Early Awareness and Readiness for
Undergraduate Programs (GEAR UP). GEAR UP is a program funded through the
United States Department of Education to help increase awareness of college entrance
requirements and the rigors of attending an institution of higher learning. This program
also strives to prepare children for postsecondary educational opportunities (Silver,
2006). Coordinating with the Institutes of Higher Learning (IHL), this program
specifically targets the low-income demographic in order to expose these students to
collegiate experiences. This exposure strives to increase the aspirations of students to
continue their education once they graduate from high school (GEAR UP Background,
2013). GEAR UP provides six-year grants to participating school districts in states that
apply for the grant. The purpose of these funds is to provide services to middle school
and high school students which the normal school budget cannot supply (Silver, 2006).

A cohort group is formed from a selected class of seventh graders in a school and
the funding and benefits follow that cohort group through graduation from high school
(GEAR UP Background, 2013). GEAR UP also offers scholarships to students (GEAR
UP Background, 2013). By offering opportunities for experiences and benefits which are
not normally offered in the traditional curriculum, this program hopes to increase the
number of students seeking education past the secondary level (Silver, 2006). Early
interventions and a scholarship component are two of the requirements that must be incorporated into any GEAR UP program (GEAR UP Background, 2013). Cabrera et al., (2006) consider GEAR UP a comprehensive intervention program. The all-encompassing nature of this program, in addition to the amount of time that this program follows a specific group of students, differentiates GEAR UP from previous large scale programs funded at the federal level (Cabrera et al., 2006). Since this program begins in middle school, it provides services to assist low-income students in their preparation to attend college (Silver, 2006). Included in this program are specialized counselors, referred to as pre-collegiate advisors or college coaches. Pre-collegiate advisors (PCA’s) are vital to the success of this program since they are dedicated counselors for a specific cohort of students (Cabrera et al., 2006). These individuals serve as an additional school counselor for participants, and assure they are motivated and informed about the path they will take into college (Gullatt & Jan, 2003).

Authorized initially by an amendment to the Higher Education Act of 1965 (HEA) and Title IV which covers all areas of student financial aid, this program is targeted specifically toward African American, Latino/a, and low-SES populations (Constantine et al., 2007). Title I, which is a program specifically designed to provide funding to educate high-risk populations of students, was enacted under this legislation (Borman, 2000). Striving to serve all factions of the public with quality educational experiences proved to be a heavy burden for the individual states. Therefore, HEA was the primary reason for the increase of federal presence in public K-12 education (Fuhrman, David, & Fritz, 2007).
GEAR UP is one of the most recent initiatives targeting this racial and economic disparity, gaining its inception in 1998. In referring favorably of the grant, “GEAR UP can further our nation’s pursuit of educational equity” (National Council for Community and Education Partnerships [NCCEP], 2013). Providing resources and services that improve the chances of success in the collegiate realm, this program strives to foster a greater appreciation for the value of a collegiate degree (Cabrera, LaNasa, & Burkum, 2001). Another major goal of the program is to increase the global competitiveness of American students for the international economy of the twenty-first century (Cabrera et al., 2001). Congressman Chaka Fattah (D-PA) stated

Young people are on board with us, and the choices they make in their lives will either tax our society or benefit our society. If they go down the various side roads of life – high school drop-out, teenage pregnancy, truancy, anti-social activities – it will tax us all individually, and tax the nation. This life that these young people have been given is not a dress rehearsal. This initiative challenges them to do their absolute best. If they accept this challenge, if they rise to their academic potential, if they take this God-given gift of life, and do their best, then it benefits us all, and it benefits the nation.

This same sentiment is found throughout the justifications for several educational reform movements, from the HEA to Head Start as well as No Child Left Behind (2001), not only the GEAR UP initiative (NCCEP, 2013).

Earning a postsecondary degree has a clear positive impact on students’ earning potential (National Center for Education Statistics, 2013). Greater benefits may be realized with the higher degree earned. That is, a four-year collegiate degree creates
greater benefits than a two-year degree or certification, and both of these have greater individual benefits than high school graduation alone (Grubb, 1999). It is apparent that students in public schools are aware of these findings, as almost two-thirds of high school graduates enter an institution of higher learning upon graduation (NCES, 2013). Unfortunately, Greene and Winters (2005) stated that while the enrollment percentage in postsecondary institutions is high, only 32% of those students are eligible to attend a university with high admission standards. The National Center for Public Policy and Higher Education (NCPPHE) conducted a study which analyzed college completion statistics. The NCPPHE (2006) report found that only 26% of college students are enrolled two years after commencing their higher education courses. Of those students who were enrolled in postsecondary institutions in 2005, a mere 18% graduated with either an associates or bachelor’s degree within a six year period (NCPPHE, 2006). GEAR UP strives to increase this percentage by offering collegiate exposure to the cohort group.

Cabrera and La Nasa (2000) found that children from at-risk backgrounds are far less likely to have easy access to information of collegiate programs. They also found that this disparity in informational access is consistent over a period in excess of three decades. Not only are students uninformed of the college admission process, but the processes involved in applying for financial aid and scholarships are a source of disinformation as well (Cabrera & La Nasa, 2000). This lack of information has an impact on their likelihood of college admission (Choy, 2002). Having a low level of information has the tendency to lower aspirations for collegiate admission, as the process involved in everything from applications to financial aid can prove to be an
insurmountable obstacle (Cabrera & La Nasa, 2000). Increasing the amount of information that the students have available to them is one of the benefits which the GEAR UP initiative provides.

Lozano, Watt, and Huerta (2009) recognized that low aspirations can be a barrier to college. By increasing the access to collegiate information, students are more likely to weigh their options for life after graduating high school (Lozano et al., 2009). This information also allows them to mentally prepare for the process of entering college and the stresses added due to an increased academic load and living away from home, many for the first time (Lozano et al., 2009). GEAR UP provides focused workshops and one-on-one sessions that ease the transition to college life and keep the aspirations of the students high (Dalpe, 2008). These measures can prove to be beneficial, as found by Marsico and Getch (2009).

In Mississippi, this federal GEAR UP program has been active in sixteen counties within the state since its inception in 2002 (GEAR UP Background, 2013). In order for a county to be eligible for GEAR UP funds, individual districts must go through an application process and be accepted for the grant (GEAR UP Background, 2013). For this grant, a total of twenty K-12 school districts in Mississippi applied and were approved for participation in this initiative (GEAR UP Background, 2013). The 2002-2008 GEAR UP Mississippi grant was one of the largest college-access and readiness initiatives in Mississippi (Hughes, 2008). GEAR UP Mississippi served as a catalyst for the alignment of state reform programs and policies by initiating school improvement programs in participating school districts (Mississippi Institution of Higher Learning, 2008).
According to research, the quality of a student's pre-college academic career is the most important factor in determining academic success (Aldeman, 2006). One of the benefits of GEAR UP is funding which can provide additional classroom and educational resources to schools that need them. Due to poverty and a wide array of social challenges perpetuating a cycle of low educational attainment throughout the state, GEAR UP strives to provide funds which otherwise could not be accessed (Kodrzycki, 2002). The Mississippi Department of Education (2014) stated that of all of the eighth grade students in the state, over 63% qualify for free or reduced price lunch, and at least 65% of all students are enrolled in Title I schools nationwide. Mississippi also leads the United States in the number of teen births which negatively impacts the economic ability of young women to advance in their careers (Annie Casey Foundation, 2001). Exasperating this problem for the youth of Mississippi is the fact that many of Mississippi’s young males become incarcerated before they complete their high school education (Justice Policy Institute, 2002). According to a report by the Justice Policy Institute (2002), the number of African American men in prison has grown to five times the rate it was 20 years ago. In 2000, more African American men were in jail than in college nationwide (Justice Policy Institute, 2002). There were 791,000 African American men in jails and prisons and only 603,032 African American men enrolled in college throughout the country according to the same report.

Approximately 75% of Mississippians sentenced to prison for an initial term have never attended college. Another 50% of the same group never graduated from high school (Mississippi Institution of Higher Learning, 2008). One of the findings compiled by the Alliance of Excellent Education (2003) states that an increase of one-year in the
average education level would cause a reduction in arrest rates by up to 11%. The amount of money spent by Mississippi is almost three times as much as an education would cost in order to incarcerate the same individual (Phillips et al., 2006). If the GEAR UP program can make a difference, then it seems logical that the effort should be made to support this program more widely.

Other GEAR UP Studies

In 2003, the United States Department of Education mandated an effectiveness study of the first two years of the GEAR UP grant (U.S. Department of Education, 2003). Since this study was conducted after the second year of the study, effects on dropout rate and college readiness were not determined. There was an aspect to the study which stated that seventh grade students felt that going to college was “very important” for their educational goals (p. 7). This study also found that the paid tutors provided for in the grant were only focused on individual students, and therefore the entire cohort of students could not be shown to have a benefit (p. 12). Additionally, the professional development which was provided for in the first two years of the grant were not deemed effective and only served very short term needs of the teachers in the schools (p. 16). Overall, since this study only examined the first two years of the grant, full effectiveness could not be determined on the same level as this study.

An early evaluation of the GEAR UP initiative was conducted by the United States Department of Education in 2008 (U.S. Department of Education, 2008). This study was conducted at the end of the cohort group’s eighth grade year. The results of this study found that the GEAR UP cohort had a higher percentage of students taking more advanced Science courses than the students in the non-GEAR UP cohort (p. 36).
However, this evaluation found that the academic performance of the students receiving services through GEAR UP did not exceed the performance of non-GEAR UP students (p. 43). This same study also found no significant difference in improved attendance between the two groups (p. 46). Since this study was concluded at the end of the second year of the grant, determinations as to the effectiveness of the program on college readiness measured by ACT scores or on dropout rate could not be evaluated.

In his doctoral thesis for the University of Colorado in 2012, Scott Mendelsberg studied the perception of the GEAR UP program in Colorado (Mendelsberg, 2012). This thesis dealt exclusively with the stated aspirations of students in the GEAR UP cohort compared to other students in the state. Being totally qualitative in nature, this thesis did little to test the overall effectiveness of the program in Colorado. Primary findings from this thesis were that the students aspirations increased significantly from their 8th grade year to their 11th grade year if they were involved in the GEAR UP initiative (p. 48). There was also a significant increase in college aspiration from 8th grade through 11th grade for the GEAR UP cohort (p. 48).

Also in 2012, Lashanda Vance wrote a dissertation for Jackson State University (Vance, 2012) which studied the GEAR UP initiative in the northern counties of Mississippi. Utilizing a causal comparative design (p. 44), ANOVA testing, and paired t-tests, some statistical findings were reported. This study found that the implementation of the GEAR UP initiative had no significant effect on dropout rate (p. 53). Further testing also found that there was no significant difference in college readiness as rated by composite ACT scores between the GEAR UP cohort of students and the non-GEAR UP
students (p. 61). Since this study was conducted in Northern Mississippi it differs from this study in the geographic location and demographics.

Summary

Providing a high quality education that prepares students for both the work force and collegiate studies is the responsibility of the United States public education system. Combine this task with the requirement that every child be afforded a free education through the completion of secondary school, and the strain on the resources of states becomes significant. Recognizing this fact, the federal government has instituted several programs over the years since the 1940’s which both outline expectations for education as well as provide for funds to facilitate equal access to high quality instruction.

These programs have concentrated on the lowest socio-economic classes of students, as this demographic has proven to be at the greatest risk of dropping out and achieving at low levels educationally. This group of students also has a greater deficit in college preparation once accepted into postsecondary institutions. There are several contributing factors which exasperate the problem, to include lack of familial support and limited academic choices in neighborhood schools. With all of this data, the federal government has concentrated on low socio-economic student populations for interventions.

Beginning with the Brown case and continuing through No Child Left Behind, the federal presence in the education of the populace has become more prevalent over the years. One of the most comprehensive programs in recent times has been the Gaining Early Awareness and Readiness for Undergraduate Programs (GEAR UP) program. This program targets specific groups of children and strives to expose them to collegiate life
early in their public school experience so that they may aspire to further their education.

Focusing primarily on increasing the percentage of students who continue to
postsecondary education, this federal incentive has been widely used throughout the
nation, and specifically in the state of Mississippi.
CHAPTER III

METHODOLOGY

Research Design

Attempting to ascertain how effective a program is at decreasing dropout rate and preparing students for college requires an analysis of historical data. These data are already maintained by local school districts and the Mississippi State Department of Education through the Mississippi Student Information System (MSIS) program. Every student enrolled in the state is assigned a unique MSIS number and that number can be tracked from the time a student enters public school until the child ceases to attend. These numbers are kept in a data base and can be grouped according to cohort group. Since all states are concerned with dropout rates, the groups of grade level cohorts are already formed. Since the GEAR UP grant only serves a designated cohort of students, the gathering of these data is relatively straightforward, once proper permission and authorization is obtained. Comparing means for different cohorts of students to determine if the GEAR UP program is effective in reducing dropout rate and increasing college readiness is the primary design of this analysis.

In addition to the analysis of historical data, questionnaires were distributed to participating schools which allowed an analysis of perceptions of the GEAR UP initiative from the perspective of the teachers. These questionnaires were distributed to teachers in grades nine through twelve in all three participating school districts in order to obtain as large of a sample size as possible. These questionnaires were printed and sent to the school principal, with directions as to how to fill out the questionnaire and where to
return the completed forms once collected from the staff. Self-addressed and postage-paid envelopes were included with the questionnaires.

Besides the quantitative analysis, there were also interviews conducted in order to add a qualitative component to this study. These interviews concentrated on the perception that the site coordinators had of the program. Since this grant has completed its full tenure, these program administrators worked with GEAR UP for a significant amount of time. By interviewing these individuals, an idea of the general perception of the efficiency and benefit of the program was determined.

Participants

The setting for this study is specific to the coastal counties of Harrison and Jackson in Mississippi. This study focused on the teachers and data collected from public middle and high schools that participated in the GEAR UP grant and received funds from this source. Permission to perform research in those districts was obtained and permission from the Internal Review Board at the University of Southern Mississippi was also secured prior to performing the study. This permission is included in Appendix D.

Research Questions and Hypotheses

Research questions concerning the effectiveness of this federal program were asked and from those questions, hypotheses were generated where appropriate and where statistical testing could be performed. Qualitative analyses of interviews and quantitative analysis of the questionnaires was used for the remaining questions. The data were analyzed utilizing *t*-tests. Since these questions were analyzed qualitatively, formal hypotheses were not listed. For the research question, "Does GEAR UP decrease dropout rate?" the following hypothesis is generated:
$H_1$: There is a statistically significant difference in dropout rate between students in the GEAR UP cohort as compared to the non-GEAR UP cohort.

The second research question is, "Are GEAR UP cohort students more prepared to enter college based on ACT scores than other students who did not receive services from this grant?"

$H_2$: There is a statistically significant difference in college readiness as measured by ACT scores in the GEAR UP cohort students when compared to the non-cohort students.

Additional questions that are of interest to the researcher and are addressed in the questionnaire include, "Do teachers feel that the focus of this program was beneficial? Do the teachers perceive that this program was effective for their students that they taught? What is the perception of the GEAR UP program from the standpoint of the district-level and school-level program administrator?" and finally, "What do School-level and District-level administrators believe about the effectiveness of the program and its benefit in reducing dropout rates?" A questionnaire was distributed to participating school districts for the first three questions posed above, and interviews were conducted for the final research question. Qualitative techniques were used to analyze the final question.

**Instrumentation**

Cohort data was obtained from participating schools and these data were placed into the SPSS statistical software program. These data consisted of numbers of students entering the seventh grade in August of 2008 and comparing those numbers with the number of students graduating in May of 2014. August of 2008 through May of 2014
was the entire time period of the GEAR UP grant. This information assisted in creating an accurate representation of attrition for the GEAR UP students. The same data were analyzed for the seventh grade students entering in August of 2007 and graduating in May of 2013. Compiling these numbers served as a control set, as this class did not receive GEAR UP services and offered a comparison of groups. If a difference in dropout rate exists, then this comparison should have identified this difference.

The same two cohorts were utilized for comparison of ACT scores. Since the GEAR UP grant paid for the ACT, there were a greater number of scores in the GEAR UP group than in the control group. This made for an unequal sample size between these two groups for this statistic. Once these data were compiled, statistical tests were conducted. The SPSS program was utilized to perform a $t$-test to compare means of the data sets. Conclusions were made upon the results of the comparison of means generated from this analysis.

The survey was developed by the researcher and is divided into four parts. This survey is included in Appendix A. The questions in the survey are designed to address the research questions guiding this study. Part one of the survey is demographic in nature, and is designed to gain an idea of the general populace participating in the survey. Part two is designed to measure the knowledge level of college programs and college entrance requirements from teachers in the survey. Part three is designed to gauge the understanding of financial aid procedures and requirements by teachers providing assistance for students. The final portion of the survey is designed to gain a consensus for the perception of the effectiveness of the program from the point of view of the
teachers. The survey utilized a five-point likert scale. Questions 5, 12, 17, 21, 32, and 33 are stated in the negative for reversal of the 1-5 scale.

This survey was piloted by a panel of experts in order to test the validity of the instrument. The panel included the Superintendent of a school district in which GEAR UP was utilized, an assistant superintendent from the same district, a high school principal and former assistant superintendent from a different district on the coast, the federal programs coordinator for a large school district, an elementary school principal who holds her doctorate in education administration, an assistant principal for a large vocational education center, and a principal of a large middle school, both of whom also have a doctorate in education administration. The final member of the panel of experts is the director of special education from a school district in which GEAR UP was implemented. This panel determined validity by taking the survey and then filling out a validity questionnaire. After the validity was confirmed, the survey was piloted utilizing selected teachers from a GEAR UP school. Twelve to fifteen teachers piloted the survey, and Cronbach's alpha was calculated from the pilot group. From the result of that calculation, a determination of reliability of the instrument was be made. Cronbach’s alphas for this pilot study are as follows: Curriculum and instruction; .884, college programs; .887, and GEAR UP; .813. These values are very close to 1.0, which allows the researcher to deem the survey reliable. These values were calculated after the reverse-ordered questions were removed. Reliability could not be assumed with those questions in place. Once the survey was deemed to be both reliable and valid, this survey was distributed on a large scale and administered to teachers of the target group. Survey data were input into the SPSS program as well and descriptive statistics were run on the
results of the survey. These descriptors were then utilized to draw conclusions from the survey data.

Finally, an interview protocol was utilized to interview five to eight school-level and district-level program administrators. This protocol was developed by the researcher and is included in Appendix B. These interview questions were used as a guide and it is understood that the natural flow of the interview occasionally covered different questions or different aspects of the questions. However, these interviews covered the administration of the GEAR UP funds specifically. These interviews were approximately thirty minutes in length, and consisted of 5 to 8 participants who have been charged with administering the GEAR UP grant at some level. Each participant provided informed consent. The participants in these interviews were those who were directly responsible for the administration of the grant. All interviews were voice recorded and transcribed, with the consent of the person being interviewed. Questions covered their experience with the GEAR UP offices, the ease by which funds were utilized, and the overall perception of the effectiveness of the program. These interviews were response coded for analysis by the researcher. General themes were noted with regard to the specific questions asked after the coding was complete. Trustworthiness was monitored throughout the process, as the researcher kept the principles of credibility, transferability and dependability in mind during the interview process.

Procedures for Collecting Data for the Research

Once permission was granted by the respective school districts and approval from the Internal Review Board from the University of Southern Mississippi was granted, a formal written request was made to high schools’ guidance departments for the cohort
data with regard to dropout rates and ACT scores. Additionally, surveys were sent to each of the schools along with postage-paid return envelopes and detailed directions as to who is to receive the survey. A deadline was placed on the survey to attempt timely completion. Interviews were coordinated and scheduled by the researcher. These interviews took place in a public, mutually agreed upon location which was convenient for each participant. Ensuring that trustworthiness was maintained in the process of the interviews required that the researcher maintain credibility, transferability and dependability.

For credibility, the researcher established that he was extremely familiar with the culture of the organizations being studied. The researcher was the supervising administrator for a GEAR UP cohort class for three years, becoming familiar with the process and goals of the program. This experience established background qualifications and experience of the researcher for the people being interviewed. The researcher also had professional contact with the teachers and coordinators on occasions prior to the commencement of this study, which served to build early familiarity. Also building on creditability was the use of triangulation in the study. For this aspect, multiple coordinators were interviewed and observations recorded. Utilizing the different individuals to interview also added to the robustness of the findings. All participants were given the option of not participating and of ending the interviews at any time, helping to ensure honesty in their responses. As noted in Chapter II, previous studies were examined in support of this research to more fully support the credibility of the research being conducted.
Transferability of the qualitative process was attempted to be addressed by taking this sample of coordinators from the southern part of Mississippi and comparing their responses to others from different regions. The researcher attempted to be as explicit and rich in the description of the interviews as possible, while still maintaining confidentiality. In this study, direct quotations of the responses were utilized in order for the reader to gain a sense of the tone of the interview. This will assist in the comparison of other studies conducted in other regions and at other times.

Establishing dependability was more difficult, as interviews with the same person can elicit different results depending on the time and situation. Designing the interview protocol to give definitive results and implementing the research as consistently as possible was paramount in this study. A standard protocol was used with all participants, and all interviews were conducted at a time and place chosen by the respondent. All but two interviews were conducted in a school setting, usually a classroom or academic office. One interview was conducted at a local coffee shop, and one at a private residence. An inquiry audit was not performed. However, since the interview protocol was reviewed and approved by the University of Southern Mississippi’s Internal Review Board, the researcher is assured that the interview questions were scrutinized.

Data Analysis

Analyzing the historical data for the dropout rate and ACT scores was completed by examining the descriptive statistics, ensuring homogeneity of variances, and finding significance by various \( p \)-values. A \( t \)-test was run to compare the means and determine statistical significance. This test was used for research questions number one and two. Statistical significance is considered to exist at \( p \leq 0.05 \). The descriptive statistics derived
from survey results were analyzed to ascertain trends in the responses and determine if
correlations exist. Means were run on research questions 3, 4, and 5, which discuss the
perceptions of benefit, effectiveness from the school level, and opinions from the
programs managers charged with administrating the grant. This analysis was derived
from the survey results. Interview responses were response coded from the interview
protocol. The coding was labeled unfavorable, neutral, or favorable and was used on all
responses received. If a response was given to a question that was not planned in the
protocol, this response was also coded and grouped accordingly. Once the responses
were collated, conclusions were drawn from the responses. This subjective data were
used to draw conclusions for the qualitative portion of the study, research question four.
CHAPTER IV
RESULTS

Introduction

The purpose of this study was to examine the overall effectiveness of the Gaining Early Awareness and Readiness for Undergraduate Programs (GEAR UP) incentive grant for the areas of dropout prevention and college readiness in Jackson and Harrison Counties of Mississippi. Teachers’ perceptions about the program implementation and effectiveness were also examined, and interviews were conducted with GEAR UP coordinators. Surveys were distributed to six participating high schools in three school districts to gauge the teachers’ perceptions. Four high schools returned surveys. Permission was granted by superintendents and principals from all three districts. There were 250 surveys given out, and 78 of them were completed and returned. The return rate was 31.2%.

Examining the teachers’ perceptions of the effectiveness of the program and its administration in the various schools was the intent of the surveys. In order to make the study more robust, the researcher also included interviews with GEAR UP coordinators from six different high schools to determine their perceptions of the program and how it was administered. These responses were coded and grouped in order to further ascertain the perception of the GEAR UP program from the coordinator’s viewpoint.

This chapter includes descriptive statistics of the respondents surveyed. Also included is a breakdown of responses to the interview protocol. Two t-tests were run to examine quantitative data provided by districts on dropout rate and collegiate readiness. ACT scores were utilized to determine college readiness. Descriptive statistics were run
on the questionnaire data in order to get a mean for each question on the five-point scale. On the survey given, the scale ranged from 1 – strongly disagree to 5 – strongly agree, with no labels given to the numbers 2, 3, and 4. Perceptions of the overall program administration as well as the effectiveness in student outcomes were examined through the use of interviews with GEAR UP coordinators from different schools and districts. General trends in the data were determined from the responses. These responses were grouped and coded by the researcher to gain an understanding of the program from the point of view of the coordinators. These trends were analyzed by the researcher and some conclusions were drawn. For the interview transcripts, the researcher predetermined the coding was going to be either ‘favorable’ or ‘unfavorable’ based on the answers to the questions posed. This predetermination is directly related to the research question regarding the perceptions of the GEAR UP initiative. The category of ‘neutral’ presented itself upon analysis of the responses. Therefore, the qualitative data, derived from the transcripts of the interviews, were coded as favorable, neutral, or unfavorable. Each category grouping was determined by both the explicit answers given and by the general impression given by the respondents during the interview. For example, if the participant was tentative or nervous in the response, the researcher determined that the question caused the person some discomfort. These observations combined with the specific answer were used to determine the coding. In an attempt to avoid the bias of the researcher, the individual coordinator was not asked if they determined the specific situation to be positive or negative. No predetermination of effectiveness was assumed prior to beginning the study. Survey responses were examined for gender, age, years of teaching experience, and certification. Descriptive
statistics from the surveys were examined in order to gain an understanding of the perceived differences between the students who received GEAR UP services and those who did not from the standpoint of the teachers who participated in the survey.

Results

This quantitative study, with a qualitative component, was used to provide the researcher with teachers’ perceptions of the effectiveness of the GEAR UP initiative and to ascertain any quantitative difference that the treated group – the class which was the recipient of the funds from the GEAR UP initiative - realized in the areas of dropout prevention and college readiness as determined by ACT scores. The survey was developed by the researcher and was divided into four parts. Part one of the survey is demographic in nature, and is designed to gain an overview of the populace which participated in the survey. Part two is designed to measure the knowledge level of college programs and college entrance requirements from teachers who participated in the survey. The third portion is designed to gauge the understanding of financial aid procedures and requirements by teachers providing assistance for students. The final portion of the survey is designed to gain a consensus for the perception of the GEAR UP initiative in terms of effectiveness and educational goals. This perception is taken from the point of view of the teachers who taught the GEAR UP cohort of students. The survey utilized a five-point Likert scale where 1 indicated Strongly Disagree and 5 indicated Strongly Agree, with no label assigned to responses for responses 2, 3, and 4. Respondents were asked to base their answers on their experience with teaching the students involved in the GEAR UP initiative. A t-test was used to analyze Research
Questions 1 and 2 where means were compared and a $p$-value of .05 was used to indicate the significance level.

Descriptive Statistics

Seventy-eight public high school teachers in south Mississippi participated in this study. These schools covered grades nine through twelve. An additional five school- and district-level grant coordinators were interviewed to determine their perceptions of the program. Demographic data for the teachers surveyed is presented in Table 1. Table 1 displays a gender distribution of 34.6% male (n=27) and 65.4% female (n=51). The data clearly indicated that more females completed surveys. The ages among the surveyed teachers were quite similar in three of the categories, with the lowest frequency occurring in category 1, which indicates teachers of ages 20-29. Also included in Table 1, is years of teaching experience. Of the 78 surveyed teachers, the largest percent of teachers had between 11-20 years of experience with 37.2% (n=29). Teachers with the smallest number of responses to the survey consisted of those teachers with 30+ years in the teaching profession, which had 3.8% (n=3). This low percentage of teachers with 30+ years could be attributed to teachers retiring after twenty-five years of service, which was the minimum amount of years required to reach retirement in Mississippi when those teachers entered the profession.

Table 1

<table>
<thead>
<tr>
<th>Teacher Demographics</th>
</tr>
</thead>
<tbody>
<tr>
<td>Variable</td>
</tr>
<tr>
<td>Gender</td>
</tr>
<tr>
<td>Male</td>
</tr>
</tbody>
</table>
Table 1 (continued).

<table>
<thead>
<tr>
<th>Female</th>
<th>51</th>
<th>65.4</th>
</tr>
</thead>
<tbody>
<tr>
<td>Age</td>
<td></td>
<td></td>
</tr>
<tr>
<td>20-29</td>
<td>10</td>
<td>12.8</td>
</tr>
<tr>
<td>30-39</td>
<td>24</td>
<td>30.8</td>
</tr>
<tr>
<td>40-49</td>
<td>24</td>
<td>30.8</td>
</tr>
<tr>
<td>50+</td>
<td>20</td>
<td>25.6</td>
</tr>
<tr>
<td>Teaching Experience</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1-5</td>
<td>21</td>
<td>26.9</td>
</tr>
<tr>
<td>6-10</td>
<td>12</td>
<td>15.4</td>
</tr>
<tr>
<td>11-20</td>
<td>29</td>
<td>37.2</td>
</tr>
<tr>
<td>21-30</td>
<td>13</td>
<td>16.7</td>
</tr>
<tr>
<td>30+</td>
<td>3</td>
<td>3.8</td>
</tr>
</tbody>
</table>

Table 2 refers to survey questions 4, 5, 6, and 7. These survey questions addressed teacher education and if teaching would be the profession that they would choose if they had the opportunity to change their career choice. Because only high schools were surveyed, 100% of the respondents were from this category. In looking at education levels of teachers surveyed, most teachers reported having a master’s degree 55.1% (n=43). Having a specialist degree was the lowest, even below having a doctorate. This degree was 2.6% (n=2). This could be contributed to the fact that many teachers with specialist degrees leave the classroom in pursuit of advanced career opportunities, or continue on to receive their doctorate. In examining whether teachers would choose this
profession again, 67.1% (n=51) stated that they would choose the profession again, as opposed to the 32.9% (n=25) who would not go into teaching as a career. Question 7 dealt with the position held by the survey respondent in the school or district.

Predictability, the majority of respondents were teachers 93.6% (n=73). The lowest response was for other position at 2.6% (n=2).

Table 2

*Teacher Demographics*

<table>
<thead>
<tr>
<th>Variable</th>
<th>Frequency</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Education Level</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Doctoral Degree</td>
<td>4</td>
<td>5.1</td>
</tr>
<tr>
<td>Specialist's Degree</td>
<td>2</td>
<td>2.6</td>
</tr>
<tr>
<td>Master’s Degree</td>
<td>43</td>
<td>55.1</td>
</tr>
<tr>
<td>Bachelor’s Degree</td>
<td>29</td>
<td>37.2</td>
</tr>
<tr>
<td><strong>Choose Teaching as a Career Again</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Yes</td>
<td>51</td>
<td>67.1</td>
</tr>
<tr>
<td>No</td>
<td>25</td>
<td>32.9</td>
</tr>
<tr>
<td><strong>Current Position Held</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Teacher</td>
<td>73</td>
<td>93.6</td>
</tr>
<tr>
<td>Administrator</td>
<td>3</td>
<td>3.8</td>
</tr>
<tr>
<td>Other</td>
<td>2</td>
<td>2.6</td>
</tr>
</tbody>
</table>
The next section of the survey dealt with the knowledge of college entrance requirements. The results in this section did not yield any data with which a conclusion could be drawn. Since responses all centered around the middle statistic of 3, there was no trend found by this survey instrument with regard to knowledge of college entrance requirements. The results ranged from a low of $M = 2.95$ for the question, “I am unable to teach reading comprehension,” to a high of $M = 3.69$ for the question, “I am aware of the minimum entry requirements of in-state colleges and universities.” The range of responses (.74) was less than one point. These results are displayed in Table 3.

Table 3

*Knowledge of College Entrance Requirements (N=78)*

<table>
<thead>
<tr>
<th>Teacher Knowledge</th>
<th>Mean</th>
<th>SD</th>
</tr>
</thead>
<tbody>
<tr>
<td>I know every graduation requirement for all of my students.</td>
<td>3.58</td>
<td>0.80</td>
</tr>
<tr>
<td>I am aware of the minimum entry requirements of in-state colleges and universities.</td>
<td>3.69</td>
<td>0.92</td>
</tr>
<tr>
<td>I know what is required for students to begin college classes without remediation.</td>
<td>3.68</td>
<td>0.88</td>
</tr>
<tr>
<td>I am unable to teach reading comprehension.</td>
<td>2.95</td>
<td>1.24</td>
</tr>
</tbody>
</table>
Table 3 (continued).

<table>
<thead>
<tr>
<th>I am aware of the mathematics requirements for my students and their desired major.</th>
<th>3.37</th>
<th>1.07</th>
</tr>
</thead>
<tbody>
<tr>
<td>I am aware of the science requirements for my students and their desired major.</td>
<td>3.28</td>
<td>1.08</td>
</tr>
<tr>
<td>I am aware of the history requirements for my students and their desired major.</td>
<td>3.32</td>
<td>1.04</td>
</tr>
<tr>
<td>I am aware of any elective requirements for all of my students to have the best chance of being accepted to the college of their choice.</td>
<td>3.37</td>
<td>0.95</td>
</tr>
</tbody>
</table>

Note: Likert-scale 1=Strongly Disagree to 5=Strongly Agree

Similar results were received from questions 18 through 24, which dealt with financial aid requirements for colleges. The overall means of responses from this set of questions went from a minimum of $M = 3.01$ for the question, “I am unsure of textbook charges”, to a maximum of $M = 3.65$ for the question, “I understand what is needed for a
FAFSA application”. This was a range of .64, again very close to the mid-range score. These results are displayed in Table 4.

Table 4

Knowledge of Financial Considerations (N=78)

<table>
<thead>
<tr>
<th>College Program</th>
<th>Mean</th>
<th>SD</th>
</tr>
</thead>
<tbody>
<tr>
<td>I understand what is needed for a FAFSA application.</td>
<td>3.65</td>
<td>1.17</td>
</tr>
<tr>
<td>I know the cost of a two-year degree.</td>
<td>3.59</td>
<td>0.97</td>
</tr>
<tr>
<td>I am unsure of textbook charges.</td>
<td>3.01</td>
<td>1.10</td>
</tr>
<tr>
<td>I am aware of laboratory charges and fees.</td>
<td>3.33</td>
<td>0.98</td>
</tr>
<tr>
<td>I have a good knowledge of residency and cafeteria charges and programs.</td>
<td>3.32</td>
<td>0.97</td>
</tr>
<tr>
<td>I have a good understanding of available scholarships, grant, and work-study programs.</td>
<td>3.60</td>
<td>0.92</td>
</tr>
</tbody>
</table>

Note: Likert-scale 1=Strongly Disagree to 5=Strongly Agree

The final set of questions dealt with the perceptions of the GEAR UP program from the standpoint of the teachers of the GEAR UP cohort of students. Responses for
this set of questions had a wider range (1.0), but still centered around 3. The low response had a mean of M = 2.77 for the question, “I have noticed better attendance in the GEAR UP cohort than in the rest of the student body.” The high response rate had a mean of M = 3.77 for the question, “I believe college visit field trips impact a student’s desire to strive for higher educational goals.”  These results are displayed in Table 5.

Table 5

*Perceptions of GEAR UP (N=78)*

<table>
<thead>
<tr>
<th>Perceptions</th>
<th>Mean</th>
<th>SD</th>
</tr>
</thead>
<tbody>
<tr>
<td>I have noticed a difference in academic performance between the GEAR UP cohort and the rest of the student body.</td>
<td>2.95</td>
<td>0.94</td>
</tr>
<tr>
<td>I have noticed better attendance in the GEAR UP cohort than in the rest of the student body.</td>
<td>2.77</td>
<td>0.90</td>
</tr>
<tr>
<td>I believe college visit field trips impact a students’ desire to strive for higher educational goals.</td>
<td>3.77</td>
<td>0.92</td>
</tr>
</tbody>
</table>
Table 5 (continued).

| Overall, the GEAR UP cohort had better behavior and attentiveness in class than other groups of students. | 2.75 | 1.00 |
| I noticed a greater degree of parental involvement in the GEAR UP cohort. | 2.65 | 0.81 |
| ACT test participation was greater with the GEAR UP cohort than with other classes. | 3.68 | 0.99 |
| I believe GEAR UP was beneficial to the majority of the cohort students. | 3.51 | 0.87 |
| I would support another GEAR UP initiative in this district. | 3.61 | 1.15 |
| GEAR UP gave the students a strong sense of identity and purpose. | 3.01 | 1.00 |
Table 5 (continued).

| Students in the GEAR UP | 3.28 | 1.03 |

Students in the GEAR UP cohort had a sense of entitlement – that is, they felt they deserved the extra benefits which came as a result of the grant.

| Youth Activity Council | 3.24 | 0.94 |

Youth Activity Council groups were beneficial to the community and the school.

Note: Likert-scale 1=Strongly Disagree to 5=Strongly Agree

In examining these data provided by the participating districts concerning ACT scores and through the Mississippi Department of Education (MDE) for graduation rate, the quantitative portion of this study is examined. This analysis directly applies to the research questions “Does GEAR UP decrease dropout rate?” and, “Are GEAR UP cohort students more prepared to enter college based on ACT scores than other students who did not receive services from this grant?”

For Research Question 1, “Does GEAR UP decrease dropout rate?” the number of students entering the 9th grade in August of 2011 (the GEAR UP cohort group) was compared to the number of students graduating from high school four years later. These data were compared to the class immediately preceding the cohort class. These data were analyzed using a t-test. Levene’s test was run on the data, and the result was greater than
.05, therefore homogeneity of variances can be assumed to exist. The same process was utilized to compare ACT college entrance test data for the GEAR UP cohort and the class immediately preceding. These data were utilized to answer research question 2, “Are GEAR UP cohort students more prepared to enter college based on ACT scores than other students who did not receive services from this grant?” Levene’s test was also run on these data, with the results supporting homogeneity of variances as well.

Since Levene’s test established homogeneity of variance, the $t$-test results may be assumed appropriate. The mean for the ACT data was $M = 19.53$ for the GEAR UP cohort, and the mean was $M = 19.40$ for the control group. Standard deviations for these same data are $SD = 1.68$ for the GEAR UP group, and $SD = 1.48$ for the control group. For the percentage of dropouts, the mean for the GEAR UP cohort was $M = 28.9$. For the control group, the mean was $M = 27.4$. Standard deviations for this set of data are $SD = 10.30$ for both the treated and control groups. There was no statistical difference in the ACT scores of the GEAR UP cohort ($M = 19.53$, $SD = 1.68$) and the non-cohort group ($M = 19.40$, $SD = 1.48$), $t(10) = .15, p = .89$. Therefore, GEAR UP did not make a significant difference in college readiness in this study according to the analysis of ACT scores. For the dropout rate, there was no statistical difference between the GEAR UP cohort ($M = 28.9$, $SD = 10.30$), and the non-cohort group ($M = 27.4$, $SD = 10.30$), $t(10) = .26, p = .80$. GEAR UP made no statistical difference in either dropout rate or college readiness as determined by ACT scores in the scope of this study.

For the qualitative data, the interview results were categorized into favorable, neutral, and unfavorable themes in terms of perceptions of the GEAR UP initiative. A response was categorized as ‘favorable’ if the overall response was positive and the
respondent seemed energetic and positive in the response. Many times the person responding was smiling or laughing during these responses, which added to the overall conclusion that the question merited a favorable coding. ‘Neutral’ responses were categorized based on both the response given and the impression of the researcher. Although not initially predetermined as a theme by the researcher, this grouping presented itself as the result of data analysis. These responses came with little emotion or animation, just answering the question based upon factual information or experiences. Responses categorized as ‘unfavorable’ both had negative responses to the questions and the respondents had a high level of anxiety or nervousness associated with their response. Additionally, the respondents’ avoidance in answering a question or giving a vague response would have made the response fall into this category. These thematic categories were utilized in order to understand what the perception of the program was from the standpoint of the GEAR UP coordinators. Questions were kept constant throughout all of the interviews. The location was agreed upon by the researcher and the coordinator interviewed. Interview question 1 dealt with prior knowledge of the GEAR UP initiative. The majority of the respondents reported that they had minimal prior knowledge of the program and felt that they needed to research the program deeply to be an effective coordinator. This initially seemed to indicate ‘neutral’ as a category, but the coordinators stated that they were expected to be the site expert on the program if they are responsible for the utilization of the funding. This caused a level of anxiety in the coordinators, and therefore these responses were grouped as unfavorable.

Prior knowledge: A program coordinator remarks, “Um, I was trained before, um, I take that back, (laugh), I was trained AFTER accepting the position, um, and we
knew very little, very little. So I've really learned most of anything relating to GEAR UP in the training and then just musclin' through it, through that first year.” A district-level grant coordinator, stated, “I didn't…I think I was, I was recruited because they needed someone who was available, someone who liked the kids, and I, I did not know anything about it, so I did my own research about it.” Another GEAR UP coordinator stated, “I really didn’t know a whole lot about it…actually, ah, it was very new to this county, so we, we didn’t know a whole lot about it before it came.”

The second question dealt with the coordinators’ knowledge of the goals of the GEAR UP initiative. Specifically, what did the coordinators believe the goals of the program to be for the grant. The majority of these responses were positive, in that they all had a good idea of what the program was supposed to be accomplishing. Since the coordinators all expressed a desire to perform well and be highly regarded in this position, the knowledge of the goals was essential to that personal desire. These responses were grouped as favorable.

Knowledge of GEAR UP goals: A school-level coordinator stated,

Each year we receive the objectives based on grade level, um, which comes from the state. So, um, our activities that we plan throughout the year have to be based on those objectives. So, um, most of it is geared towards core curriculum…most of it is…they want to see college visits, they want to see how we are preparing students for college. Tutorin', college trips, um, anything relating to state tests.

A GEAR UP coordinator stated, “The GEAR UP program is designed to increase the number of low-income – high risk - students who are prepared to enter college. Enter and, (cough) – excuse me - and succeed in college, in postsecondary education.” Another
GEAR UP coordinator agrees, “Ah, the goals of the program was really to, ah, encourage the students to do well academically, as well as to, ah, encourage them to go to college.” Another coordinator stated decisively that the goals of the program were well known and consistent, “Increased graduation rate and ACT scores.”

These responses were coded as favorable by the researcher. This was due to the coordinators having a good understanding as to what the general goals of the grant were and what the goals were designed to attain. Knowing what the end goal was designed to be was perceived to have added consistency of the implementation of the program, according to the coordinators interviewed.

When questioned about the overall efficiency of the disbursement of funds associated with the grant, the responses were mixed. Although there were favorable statements to each response, there were as many favorable as unfavorable statements in the same response to the interview question. These responses seemed to vary based upon the ability of the individual coordinator to utilize funds provided by GEAR UP. These responses were grouped as neutral.

*Utilization of funds:* From a GEAR UP coordinator, a neutral response:

We have had reimbursement issues due to the documentation, um, some things were not explained fully until after the fact, so then you were trying to scramble to make sure you had the correct documentation, um, and a lot of it really hasn’t really – since we are on a block for scheduling – you know you have a group that may just have nine week classes. Well, if you don't have stuff planned ahead of time or if it doesn’t get approved, then that whole class may miss out on something.
From another GEAR UP coordinator there was a different focus, but a neutral response as coded by the researcher due to the response not directly addressing the question, but focusing on the coordinator’s desire to utilize funds for her desired educational goals:

The Career teacher’s first question was “have you taken the ACT”? You know, the thing was that, um, about 99% of the students answered “no.” (sigh) This response was, it was both enlightening and discouraging. This response, this gave me extra motivation to provide free opportunities, as many as I could, but up to four, for most GEAR UP students to take the ACT. I really wanted to have the grant pay, um, and for all GEAR UP students to take the ACT for free. I felt that if we could give them that chance, you know, the opportunity to take this test, then one more hurdle toward college would be finished, would be complete.

A response coded by the researcher as neutral was supplied by another GEAR UP coordinator:

That we were going to take the kids up to, to do a college visit, but if we wanted to do something cultural, to take them to different restaurants, expose them, take them up to the light house, you know, things like that. These things are empowering. Kids are not exposed to so much of this, and, and I saw my job as exposing them to those type of things. The lighthouse and things like that. You know hibachi – kids are not exposed to things like that. But I saw that the monies, because of the growth of the office staff, for the office, and their personal trips, and the casinos and all of those type of things….it was harder to justify those type of trips.
Still another GEAR UP coordinator gave a response coded as neutral by the researcher, despite a favorable tone: “I think it did [assist the students academically prepare for postsecondary education]. I think it did because their…GEAR UP offered a lot, of course we had the students with the ACT, we actually had several presentations that we did with the students, so I think it helped academically.”

When questioned about the overall effectiveness of the program in general, there was another neutral response from a GEAR UP coordinator.

As far as I know…we have measured positive results, although its limited…the graduation rate has increased, but I can’t necessarily say it is due to GEAR UP, so…

Researcher: Ok. So, it wasn’t just a ‘spike’ in one class…the GEAR UP class…and graduation rate went, “my gosh, its gotten a lot better!”

Coordinator: No.

Researcher: Ok. Ah, what about preparing students for postsecondary? Have you noticed any difference in ACT scores or…?

Coordinator: As far as an increase in ACT scores, I can’t really say to that, but as far as increasing the interest in the number of students looking into college readiness…yes.

From the cumulative impressions of researcher based upon the interview data, there was not a preponderance of favorable or unfavorable responses concerning the grant. The category of ‘neutral’ presented itself, even though the researcher did not intend for this theme to be a category at the beginning of the interview process. Although
the goals appeared to be clear to the coordinators, the implementation and use of the funds varied from district to district.

Summary

Using a quantitative study with a qualitative component to determine the overall effectiveness and the teachers’ and grant coordinators’ perceptions of the GEAR UP grant in southern Mississippi gives a broader understanding of the program than either method could give independently. The quantitative data for graduation rates and ACT score data were provided by the participating districts and placed into the SPSS statistical program for the *t*-test to be performed. The survey instrument, which was developed by the researcher, included teacher demographics, teacher knowledge of collegiate programs, and teacher perceptions of the program. The interview consisted of ten questions which had the purpose of both describing the perceptions of the program from the coordinators and giving the researcher an overall feel as to the attitudes of the coordinators interviewed. Data were examined for each section of the researcher-generated questionnaire, and the researcher examined the means and standard deviations of all quantitative data and for statistical significance. Quantitatively, there was no difference in the GEAR UP cohort group and the general population of students in terms of the statistical test performed on these data. Qualitatively, the analysis of responses centered on emerging themes of the interview responses. This analysis revealed that there was not a preponderance of either favorable or unfavorable responses to the perceptions of the program from the standpoint of the GEAR UP coordinators interviewed. Since there was not a consistent trend in the data, the conclusion that the
program was more effective in increasing college readiness or decreasing dropout rates is not supported by this study.
CHAPTER V

CONCLUSIONS AND RECOMMENDATIONS

The purpose of this study was to determine the overall effectiveness of the Gaining Early Awareness and Readiness for Undergraduate Programs (GEAR UP) grant in southern Mississippi school districts with regard to reducing dropout rate and increasing college readiness. Additionally, this study examined the teachers’ and program coordinators’ perceptions of the program. Specifically, this study examined and compared dropout rates and ACT scores for two separate cohort classes in six southern Mississippi high schools. The teachers of the students who were served by the GEAR UP grant in those same schools were surveyed as to their perceptions of the administration of the GEAR UP grant incentive program. Finally, this study presented the perceptions of school and district-level program coordinators who agreed to be interviewed for this study. Self-reported factors were analyzed by determining means and standard deviations for the responses to the survey instrument. Teachers in this study were from public schools in south Mississippi serving students in the grades 9 through 12. Chapter V includes a summary of procedures, major findings, discussion of the findings, limitations of the study, and recommendations for future research.

Summary of Procedures

The researcher developed a four-section survey that addressed teacher demographics, knowledge of curriculum and instruction, knowledge of college programs and costs, and teacher perceptions of the GEAR UP initiative. A panel of experts comprised of five administrators and lead teachers reviewed the survey instrument and provided the researcher with clarity and content validity. Following this procedure, the
Institutional Review Board (IRB) for The University of Southern Mississippi granted approval of the study. Upon receiving approval from IRB, the researcher sent letters to principals and educators in the schools and districts which were designated in the IRB application. The researcher then conducted a pilot study in which fifteen teachers of GEAR UP cohort students responded to the survey instrument which consisted of 38 questions, measuring data pertaining to prior knowledge of collegiate requirements and perceptions of the GEAR UP initiative. Based upon the feedback from this pilot study, reversed ordered questions were disregarded from the analysis of the questionnaire.

Results from the pilot study were entered into SPSS version 20, and a Cronbach’s alpha reliability coefficient test was used to examine the reliability of the survey instrument. The results of Cronbach’s alpha test were all above .80. The survey instrument was deemed to be adequate to produce reliable results once the reversed-ordered questions were omitted.

In addition to the survey data, the schools also provided graduation rate and ACT test score data. Examining the graduation rate and ACT scores from each of the school districts studied was the primary quantitative element for this study. This information was voluntarily provided to the researcher by the districts. All letters of permission and IRB approval notifications are included as appendices to this document. Teachers and GEAR UP coordinators, both at the school level and at the district level, from middle and high schools in three school districts in south Mississippi participated in this research study.

Upon receiving permission to conduct the study in the three school districts of interest, the researcher hand delivered surveys to one principal, and mailed all other
surveys to the remaining principals with specific directions as to the administration and return. Self-addressed and postage-paid envelopes were included with the surveys and instructions. The researcher asked principals to provide faculty members with a copy of the survey. The principal administered the questionnaire at a time which best served his or her faculty. Once the surveys were completed, the surveys and dropout data, along with ACT data, were placed in the return envelope provided and mailed to the researcher. The researcher collected the surveys from each school in the return envelope provided and compiled data for the study. School districts were given the opportunity to request a summary of the data upon completion of the dissertation process. No district has yet made such a request.

The researcher distributed a total of 250 surveys to schools. Of the surveys distributed, 78 completed surveys were returned. Upon receiving surveys from respondents, the researcher input raw data in an Excel spreadsheet. This survey data was then entered into SPSS version 20 and analyzed with descriptive statistics. Dropout rate and ACT score data from the two studied cohort groups were also input into Excel and then input into SPSS, where a Levene’s test for homogeneity of variances and a t-test were performed. Structured interviews were conducted with seven different school- and district-level GEAR UP coordinators in support of this study. These individuals were only interviewed one time, for a period of approximately thirty to forty minutes per person. These interviews were audio recorded and later transcribed by the researcher. The responses to the set interview protocol were then coded into groups of responses to include “favorable”, “neutral”, and ”unfavorable” with regard to the administration, ease of implementation, and effectiveness of the GEAR UP program.
Summary of Major Findings

In order for the researcher to examine the effectiveness of the GEAR UP program, data were collected on the dropout rate and ACT scores from the five schools studied. Based on the analysis of this data, the GEAR UP incentive had no statistical impact on the students when compared to other groups of students who did not receive services and funds from the grant. That is, after participating in the GEAR UP program from the time the cohort group entered seventh grade and continuing through graduation from high school, there was not a significant decrease in dropout rate or increase in college readiness as measured by reported ACT scores. Additionally, there was no indication that the program was perceived as beneficial by the teachers of the cohort students.

This finding supports the findings of the other studies referenced in Chapter II. Both the United States Department of Education Analysis (U. S. Department of Education, 2008), and the doctoral dissertation by Lashanda Vance, a graduate student who attended Delta State University (Vance, 2012) found that the overall impact of the GEAR UP program was not statistically significant. Additional studies have found some positive aspects from the cohort group. One study indicated that students of the cohort had a more positive attitude toward collegiate attainment (Mendelsberg, 2012), and another study showed that more cohort students were taking more advanced science classes (U. S. Department of Education, 2003). Neither of these studies quantified the effectiveness of the program with regard to the stated goals of dropout prevention and collegiate readiness, and therefore their relative significance to this particular study is limited.
Reviewing these previous studies in addition to performing the research for this study, the conclusion is that the GEAR UP program may not be effective at meeting its stated goals of decreasing dropout rate and increasing collegiate readiness. Although there have been some positive perceptions and experiences, primarily with the relationship-building aspects of the program, there is no evidence that GEAR UP is assisting students who are considered dropout risks. With the time allocated to this program paired with the funds which have been committed, more significant results were expected by this researcher.

Discussion

As discussed in Chapter II, the cost of college is prohibitive for many people (De La Rosa & Tierney, 2006). Although student loans are available and scholarships may be applied for, many students with aspirations for secondary education do not qualify for either. Combine this with a workforce-oriented culture in many homes and the goal of college attainment appears intimidating (Fallace, 2011). GEAR UP attempted to alleviate this anxiety by exposing students and their families to college campuses and the requirements for college. Many coordinators attempted to introduce families to the scholarship process and student loan requirements, but the process can still be intimidating to many first-generation families (Jager-Hyman, 2004).

With a grant as encompassing as the GEAR UP grant, more significant results were expected by this researcher. Increasing the students’ knowledge of collegiate life, providing campus visits, and increasing the knowledge of professional careers requiring postsecondary degrees seems a sound strategy to increase the awareness of collegiate opportunities as well as the aspirations of the cohort group. Attempting to have students
readjust their goals to include college degree attainment should have increased the overall readiness for postsecondary educational opportunities and decreased the dropout rate, if this goal was successful. Since all students in the cohort class were exposed to the programs funded by GEAR UP throughout their secondary school experience, the researcher expected significant improvement in the areas of college readiness as measured by the ACT test results and dropout rate. Although this study does not definitively ascertain why this may not have occurred, this researcher can offer alternate theories.

One possibility that dropout rate was not decreased is that the structure of the school environment may have not been appealing to some students. Vocational education was not stressed as part of the GEAR UP initiative. The structure of the public educational system, with the emphasis heavily stressing collegiate readiness, may have contributed to the dropout rate. Many low-income students have had little success in the traditional educational setting (Ward et al., 2013). It is possible that long before graduation, some of these students may have lost a desire to continue their education due to this emphasis on traditional curriculum. If more exposure to the vocational fields were included in this grant, perhaps the cohort group of students could have completed high school or even strove for acceptance to a career-technical community college program (Tajalli & Opheim, 2004). Giving students who are not performing well in the academic core courses the option of a career degree could have made a difference in dropout rate (Lee & Burkham, 2003).

With the funds and resources being utilized primarily for college visits and field trips, tutoring in the academic subjects would have remained at the level which was being
offered to other students. If a portion of these funds were allocated for specific tutoring for the ACT test, or to provide for additional teachers to assist students who are not performing to proficient levels, academic preparation for college could have increased. Also, if the students were exposed to a more intimate classroom setting with a lower student-to-teacher ratio, the overall attitude of the students towards the scholastic setting may have improved. If this type of class could be offered, then it is likely that the students would have achieved at a higher academic level (Lee & Croninger, 2001).

This study differs from previous studies of GEAR UP effectiveness in significant ways. In the study conducted in 2003 and another study conducted in 2008 by the U. S. Department of Education, only the first two years of the grant were included. These studies did not analyze either of the goals of the GEAR UP initiative examined in this study, collegiate readiness, or dropout rate. These studies measured the attitudes and the courses taken by the students in the GEAR UP cohort, but the short amount of time that the program had been in effect limited the findings (USDOE, 2003, 2008).

More far-reaching in scope was the study conducted by Scott Mendelsberg in 2012. This study covered the entire period of the grant, but dealt only with the aspirations and attitudes of the students involved in the cohort as compared to students outside of the cohort. Also, this study differs geographically and demographically, in that it was conducted in schools in Colorado. Neither college readiness as determined by ACT scores or dropout rate was analyzed in this study (Mendelsberg, 2012).

Lashanda Vance’s study conducted in 2012 was very similar to this analysis of the GEAR UP program. The primary difference between this study and Dr. Vance’s is the geographic area and the demographics of the students (Vance, 2012). This study was
conducted in the northern area of Mississippi, which is more rural and the coast is more industrialized and urban. Also, the coast of Mississippi has a lower poverty rate and a higher population per capita (U. S. Census Bureau, 2009), which provides for different demographics of students.

Considerations such as these are important to the professional educator. Knowing if grants or programs are effective in meeting their goals could make the difference whether a school district applies for the grant. Discerning educational leaders have a responsibility to the taxpayers of their districts to work for the overall benefit of the students. Superintendents and principals should only implement programs which have a high degree of probability for success. Investigating the effectiveness of programs with as large of a footprint as the GEAR UP initiative prior to full implementation should occur in all districts.

Conclusion

This study concluded that the GEAR UP grant was not effective in either decreasing dropout rate or increasing collegiate readiness as measured by ACT scores in two coastal counties in Mississippi. This study found that there was a perception held by the coordinators that the administration of the grant from the state offices of GEAR UP was inefficient and unresponsive to the requests of the individual schools. These perceptions could have had detrimental effects on the motivation and enthusiasm of the coordinators. If a lack of motivation occurred and the coordinators remained in their positions, it is possible that the programs and activities that were selected for the cohort could have been detrimentally affected. Coordinators could have remained content with the visits and activities which were approved early in the program. This could have led
to the repetition of ineffective incentives leading to lower quality activities. One of the common factors mentioned by GEAR UP coordinators was the amount of time which was required for approval of a project or field trip. This lead time requirement could have prevented some activities which came up quickly and with a shorter time with which to apply. This combined with the perceived inefficient use of funding noted by the coordinators during the interviews could have detrimentally affected the outcome of the program as a whole.

Another possibility is that if the funds provided by GEAR UP were utilized to influence the perceptions of the students in a positive manner and increase their performance academically, then they could be placed in a better position to continue to the postsecondary level of education. If there were provisions made for direct intervention which were designed specifically to increase ACT scores and improve motivation to stay in high school, rather than try to increase desire for collegiate access, it is possible that the final outcomes would have been more successful. Whether from the structure of the school, the demands of family or culture, or a lack of academic proficiency, students often lose their desire to remain in public school in the ninth grade (Ascher, 1987). If GEAR UP were to concentrate on upper elementary level students as well as middle level students leading up to this key grade, perhaps dropout rate could have been more positively affected as well.

Demographically speaking, perhaps the cohorts studied were so close in their educational experience that the effects of GEAR UP were felt by both classes. That is, if the researcher would have compared cohort classes which were separated by four years rather than one year, results might have been statistically significant. The separation in
years would have ensured no exposure to the GEAR UP grant at all. The risk with this degree of separation is that the teachers of the students could have been significantly different. Having vastly different educational staffs which were responsible for teaching the students would have added an interaction effect which would have to have been considered.

Although this study found no difference in the cohort as compared to non-GEAR UP students, educators could still be encouraged by the legislative effort which served to spearhead this program. Given that GEAR UP was heavily funded and spanned a large amount of time, it is obvious that the lawmakers were aware of the gravity of the educational issues in the United States. Perhaps in the future there can be other programs which are funded equally or that the GEAR UP program can be combined with other initiatives in order to improve the public education efforts of the nation. With the future leaders of the world left in the hands of public educators daily, these efforts must not be discontinued.

Recommendations for Policy

Spanning six years and having a budget of eighteen million dollars, the GEAR UP program has not met the goals which were set out for it, according to this study as well as other studies noted in Chapter II (Mendelsberg, 2012; U. S. Department of Education, 2008; Vance, 2012). The apparent ineffectiveness of the program leads to recommendations for changes in policy and practice.

In the area of policy, the GEAR UP initiative was solely focused on students achieving collegiate attainment. From the beginning of the grant in the seventh grade, college visits and postgraduate preparation was stressed by the coordinators. This was in
support of one of the primary goals of the GEAR UP initiative, which was to improve collegiate ascension by cohort students. A policy change which could be made to improve collegiate readiness could be utilizing the GEAR UP funds to reduce class size in targeted schools. By providing additional teachers to the cohort, the class sizes could be reduced and more individualized attention could be given to each student. This strategy has proven to be effective in Title I schools nationally, and continues to be funded (Cabrera et al., 2006). Utilizing this strategy with a different source of funding would necessitate a policy change in the makeup of the grant on a national level.

Recommendations for Practice

Utilizing GEAR UP funds for targeted instruction or tutoring of low-performing students is a recommended change in practice for this funding. Collegiate visits are beneficial for increasing the interest of students, but could be funded by other means. Rather than funding college visits, it is recommended that GEAR UP assets be utilized to pay for educational specialists and tutors. Targeting skills such as reading and remediating mathematics and phonics, tangible results could possibly result from focusing on the lowest-level students based upon standardized test scores in the cohort.

GEAR UP begins the cohort funding in the seventh grade. This funding is utilized for field trips to colleges and universities. It is recommended that the college visits be stressed more at the later stages of the grant, perhaps in the tenth and eleventh grades. At the seventh and eighth grade level, providing positive school experiences and increasing the engagement level of the at-risk population might prove to be more beneficial. By utilizing funds to sponsor activities and programs at the parent school, it is possible that the overall school experience become more positive for all students.
Recommendations for Future Research

The analysis of the procedures for obtaining funds for projects and the consistency by which these funds are disbursed in different school districts would be a recommended avenue of research. Based on the interviews with the coordinators, there were difficulties and inconsistencies when the topic of approval for funds was discussed. Researching current methods for disbursement of funds and possible avenues for streamlining the financial resources seems to be an obvious area for research.

Currently the GEAR UP program focuses on college visits and field trips to increase collegiate aspirations of students. These visits and other field trips to various educational institutions are beneficial when it comes to exposing students to collegiate life. Other research could explore how to make these visits more centered on the interests of the students. Would these visits be more effective if paired with interest surveys? Perhaps the differentiating of the trips to individual students, including students with vocational aspirations would garner greater results. Relating success in public school to success in the workforce could produce greater reduction in decreasing dropout rate, due to the students being able to relate their current studies directly to success in the workforce.

Limitations

This study was only conducted in the counties of Jackson and Harrison in southern Mississippi. In those counties, not all high schools which participated in the GEAR UP grant were included in the analysis. Since the study did not take data from every school participating in the grant during this time period, the strength of the study was limited. Additionally, of the school districts selected, not all schools in those
districts returned surveys or provided data for analysis. Of the schools that participated, only 78 of the 250 surveys were returned. The low return rate on the surveys also limited the scope of the study. If all schools that participated in the GEAR UP initiative were surveyed, different results may have been garnered from the study.

During the lifetime of this grant in Mississippi, there was only one central administrative office for all participating schools. Since all of the grant coordinators experienced difficulties in dealing with approval for funding and reimbursement for expenses, this central location can be seen as a limitation. If other coordinators located in various regions of the state were in place, the efficiency of the utilization of the grant may have resulted.
APPENDIX A

SAMPLE SURVEY

This survey was generated by the researcher for the purposes of this study.

*Gaining Early Awareness and Readiness for Undergraduate Programs (GEAR UP) Survey*

Please complete the following survey. This survey is anonymous and will be used for the purpose of the researcher’s dissertation. Your input is critical to the validity of the researcher’s work. Please be honest in answering all questions.

Before you begin, please answer the consent statement below.

Do you voluntarily consent to take this survey and give your permission to the researcher for the use of your answers in his research?

______ Yes, I voluntarily give my permission to the researcher.

______ No, I do not voluntarily give my permission to the researcher.

If you answered NO to this survey, please do not respond to any question.

<table>
<thead>
<tr>
<th>Teacher Characteristics</th>
<th>Please answer the following questions by circling or filling in the correct response.</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. What is your gender?</td>
<td>(1) Male (2) Female</td>
</tr>
<tr>
<td>2. What is your age?</td>
<td>(1) 20-29 (2) 30-39 (3) 40-49 (4) 50+</td>
</tr>
<tr>
<td>3. Counting this school year, how many years have you been in education?</td>
<td>(1) 1-5 (2) 6-10 (3) 11-20 (4) 21-30 (5) 30+</td>
</tr>
<tr>
<td>4. In what type of school do you work?</td>
<td>(1) Elementary (2) Middle School/Junior High (3) High School</td>
</tr>
<tr>
<td>5. What is the highest level of education you have achieved?</td>
<td>(1) Doctoral Degree (2) Specialist’s Degree (3) Master’s Degree (4) Bachelor’s Degree (5) Associates Degree (6) High School Diploma</td>
</tr>
<tr>
<td>6. If you had the opportunity to go back to college, would you choose the teaching profession again?</td>
<td>(1) Yes (2) No</td>
</tr>
<tr>
<td>7. What primary position do you hold currently?</td>
<td>(1) Assistant (2) Teacher (3) Administrator (4) Other building support</td>
</tr>
</tbody>
</table>
Knowledge of Curriculum and Instruction

Please rate the following statements by circling or coloring in the corresponding number with the following representation:

(1) Do not understand at all  (2) Only basic understanding  (3) Understand enough to know where to go for answers  (4) Understand well and can assist others  (5) Thorough understanding at all levels

<table>
<thead>
<tr>
<th>Curriculum and Instruction</th>
<th>Please indicate the following statements as noted above</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>No Understanding</td>
</tr>
<tr>
<td>8. I know every graduation requirement for all of my students.</td>
<td>(1)</td>
</tr>
<tr>
<td>9. I am aware of the minimum entry requirements of in-state colleges and universities.</td>
<td>(1)</td>
</tr>
<tr>
<td>10. I know what is required for students to begin college classes without remediation.</td>
<td>(1)</td>
</tr>
<tr>
<td>11. I know how standardized assessments are tied to collegiate readiness.</td>
<td>(1)</td>
</tr>
<tr>
<td>12. I am unable to teach reading comprehension.</td>
<td>(1)</td>
</tr>
<tr>
<td>13. I am aware of the mathematics requirements for my students and their desired major.</td>
<td>(1)</td>
</tr>
<tr>
<td>14. I am aware of the science requirements for my students and their desired major.</td>
<td>(1)</td>
</tr>
<tr>
<td>15. I am aware of the history requirements for my students and their desired major.</td>
<td>(1)</td>
</tr>
<tr>
<td>16. I am aware of any elective requirements for all of my students to have the best chance of being accepted to the college of their choice.</td>
<td>(1)</td>
</tr>
<tr>
<td>17. I do not know what the minimum ACT scores are for college acceptance for most schools in the area.</td>
<td>(1)</td>
</tr>
</tbody>
</table>
Knowledge of College Programs and Costs

Please rate the following statements by circling or coloring in the corresponding number with the following representation:

(1) Do not understand at all  (2) Only basic understanding  (3) Understand enough to know where to go for answers  (4) Understand well and can assist others  (5) Thorough understanding at all levels

<table>
<thead>
<tr>
<th>College Programs and Financial Aid</th>
<th>Please indicate the following statements as noted above</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>No Understanding</td>
</tr>
<tr>
<td>18. I understand what is needed for a FAFSA application.</td>
<td>(1) (2) (3) (4) (5)</td>
</tr>
<tr>
<td>19. I know the cost of a two-year degree.</td>
<td>(1) (2) (3) (4) (5)</td>
</tr>
<tr>
<td>20. I know the cost of a four-year degree.</td>
<td>(1) (2) (3) (4) (5)</td>
</tr>
<tr>
<td>21. I am unsure of textbook charges.</td>
<td>(1) (2) (3) (4) (5)</td>
</tr>
<tr>
<td>22. I am aware of laboratory charges and fees.</td>
<td>(1) (2) (3) (4) (5)</td>
</tr>
<tr>
<td>23. I have a good knowledge of residency and cafeteria charges and programs.</td>
<td>(1) (2) (3) (4) (5)</td>
</tr>
<tr>
<td>24. I have a good understanding of available scholarships, grants, and work-study programs.</td>
<td>(1) (2) (3) (4) (5)</td>
</tr>
</tbody>
</table>

Perception of the GEAR UP initiative.

Please rate the following statements by circling or coloring in the corresponding number with the following representation:

(1) Strongly disagree  (2) Disagree  (3) Neutral  (4) Agree  (5) Strongly Agree

<table>
<thead>
<tr>
<th>GEAR UP perception</th>
<th>Please indicate the following statements as noted above</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Strongly Disagree</td>
</tr>
<tr>
<td>25. I have noticed a difference in academic performance between the GEAR UP cohort and the rest of the student body.</td>
<td>(1) (2) (3) (4) (5)</td>
</tr>
<tr>
<td>26. I have noticed better attendance in the GEAR UP cohort than in the rest of the student body.</td>
<td>(1) (2) (3) (4) (5)</td>
</tr>
<tr>
<td>27. I believe college visit field trips impact a students' desire to strive for higher educational goals.</td>
<td>(1) (2) (3) (4) (5)</td>
</tr>
<tr>
<td>28. GEAR UP funds were used in an efficient manner.</td>
<td>(1) (2) (3) (4) (5)</td>
</tr>
<tr>
<td>29. Overall, the GEAR UP cohort had better behavior and attentiveness in class than other groups of students.</td>
<td>(1) (2) (3) (4) (5)</td>
</tr>
<tr>
<td>30. I noticed a greater degree of parental involvement in the GEAR UP cohort.</td>
<td>(1) (2) (3) (4) (5)</td>
</tr>
<tr>
<td>31. ACT test participation was greater with the GEAR UP cohort than with other classes.</td>
<td>(1) (2) (3) (4) (5)</td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td>---</td>
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</tr>
<tr>
<td>32. I have not noticed significantly fewer dropouts in the GEAR UP cohort.</td>
<td>(1)</td>
</tr>
<tr>
<td>33. I believe GEAR UP was mismanaged.</td>
<td>(1)</td>
</tr>
<tr>
<td>34. I believe GEAR UP was beneficial to the majority of the cohort students.</td>
<td>(1)</td>
</tr>
<tr>
<td>35. I would support another GEAR UP initiative in this district.</td>
<td>(1)</td>
</tr>
<tr>
<td>36. GEAR UP gave the students a strong sense of identity and purpose.</td>
<td>(1)</td>
</tr>
<tr>
<td>Students in the GEAR UP cohort had a sense of entitlement – that is, they felt they deserved the extra benefits which came as a result of the grant.</td>
<td>(1)</td>
</tr>
<tr>
<td>37. Youth Activity Council groups were beneficial to the community and the school.</td>
<td>(1)</td>
</tr>
</tbody>
</table>
APPENDIX B

SAMPLE INTERVIEW PROTOCOL

This interview instrument was developed by the researcher for the purposes of this study.

Q: Explain what you knew about the GEAR UP program prior to accepting this position in the district?

Q: When you initially began working with the state coordinators of GEAR UP, what was your understanding of the goals of the program?

Q: How has your understanding of these goals changed as you have spent more time working with the program?

Q: Do you think that the initial goals of GEAR UP have changed over the years since its conception? Why or Why not?

Q: What changes in emphasis or in funding have you noticed in your two years as GEAR UP Coordinator?

Q: How has this program been effective in reducing the drop out rate?

Q: How has this program been effective in preparing the students for post secondary education?

Q: Has GEAR UP been viewed favorably by the staff of the schools in which it was implemented? Why or Why not?

Q: What have been the most memorable and significant aspects of your position that you have encountered during your tenure as GEAR UP Coordinator?

Q: The class of 2014 is graduating this year. What do you see as your role evolving into in the 2014-2015 school year?

Q: If this program was funded for another cohort beginning with the seventh grade, what advice would you offer to a coordinator accepting this position?
APPENDIX C

PERMISSION TO CONDUCT RESEARCH FROM SCHOOL DISTRICTS

November 4, 2013

Dear Dr. [Name],

I respectfully request permission to conduct research in your district in support of my Doctoral Dissertation. The subject of my dissertation is the overall effectiveness of the Gaining Early Awareness and Readiness for Undergraduate Programs (GEAR UP) initiative in Mississippi. Specifically, now that this program is in its final year, I am going to study the impact on dropout prevention, college ascension, and collegiate preparedness of students in the [District Name] school district as well as others throughout the state.

I am requesting to interview program coordinators for the qualitative side of my study. I am also requesting permission to distribute surveys to teachers in grade levels 7-12 who have been a part of this initiative since its initial inception within the district. This data will be used in the quantitative portion of my dissertation, in addition to historical data provided by the state.

You cooperation in allowing this research is greatly appreciated.

Very respectfully,

[Signature]

David Maxwell
March 6, 2014

David Maxwell
2200 Robertsdale Rd.
Gautier, MS 39553

Ref: Dissertation Permission

Dear Mr. Maxwell:

As Superintendent of [redacted], I grant permission for you to use the school leaders in the [redacted] for your dissertation on A Mixed Methods Study of the Effectiveness of the Gaining Early Awareness and Readiness for Undergraduate Programs (GEAR UP) Federal Incentive Program in Southern Mississippi Public Secondary Schools.

Please contact the Principals of the [redacted]

Attached you will find a list of Schools and Principals.

If I maybe of further assistance, please feel free to contact my office.

Sincerely,

[redacted]

Superintendent

HA/se

Enclosure(s)
March 17, 2014

Mr. David Maxwell
2200 Robertsdale Drive
Gautier, MS 39553

Dear Mr. Maxwell:

Please accept this correspondence as approval for you to gather data from schools in the [redacted] District. It is my understanding that you will use a survey to collect data regarding the overall effectiveness of the Gaining Early Awareness and Readiness for Undergraduate Programs (GEAR UP) initiative in Mississippi.

Sincerely,

Superintendent
APPENDIX D

IRB APPROVAL FOR RESEARCH

THE UNIVERSITY OF SOUTHERN MISSISSIPPI

INSTITUTIONAL REVIEW BOARD
118 College Drive #5147 | Hattiesburg, MS 34060-0001
Phone: 601.266.5997 | Fax: 601.266.4377 | www.usm.edu/research/institutional-review-board

NOTICE OF COMMITTEE ACTION

The project has been reviewed by The University of Southern Mississippi Institutional Review Board in accordance with Federal Drug Administration regulations (21 CFR 26, 111), Department of Health and Human Services (45 CFR Part 46), and university guidelines to ensure adherence to the following criteria:

- The risks to subjects are minimized.
- The risks to subjects are reasonable in relation to the anticipated benefits.
- The selection of subjects is equitable.
- Informed consent is adequate and appropriately documented.
- Where appropriate, the research plan makes adequate provisions for monitoring the data collected to ensure the safety of the subjects.
- Where appropriate, there are adequate provisions to protect the privacy of subjects and to maintain the confidentiality of all data.
- Appropriate additional safeguards have been included to protect vulnerable subjects.
- Any unanticipated, serious, or continuing problems encountered regarding risks to subjects must be reported immediately, but not later than 10 days following the event. This should be reported to the IRB Office via the "Adverse Event Report Form".
- If approved, the maximum period of approval is limited to twelve months.

Projects that exceed this period must submit an application for renewal or continuation.

PROTOCOL NUMBER: 14041201
PROJECT TITLE: A Mixed Methods Study of the Effectiveness of the Gaining Early Awareness and Readiness for Undergraduate Programs (GEAR UP) Federal Incentive Program in Southern Mississippi Public Secondary Schools
PROJECT TYPE: New Project
RESEARCHER(S): David Maxwell
COLLEGE/DIVISION: College of Education and Psychology
DEPARTMENT: Educational Leadership and School Counseling
FUNDING AGENCY/SPONSOR: N/A
IRB COMMITTEE ACTION: Exempt Review Approval
PERIOD OF APPROVAL: 04/14/2014 to 04/13/2015

Lawrence A. Hosman, Ph.D.
Institutional Review Board
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