EXPLORING PRINCIPALS' PERCEPTIONS OF CHARACTERISTICS, PRACTICES, AND PROGRAMS THAT INFLUENCE COLLEGE READINESS FOR LOW SOCIOECONOMIC STUDENTS IN SMALLER TEXAS HIGH SCHOOLS: A DELPHI STUDY

by

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ABSTRACT

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The purpose of this study was to investigate characteristics, practices, programs, and other factors of smaller Texas high schools that are successful at producing college-ready low-SES graduates. The analysis of the data provides insight into the characteristics, practices, programs, and other factors that influence college readiness for low-SES students. A Delphi panel of 35 high school principals participated in this study. The qualifying principals were leaders of Texas high schools with less than 1,000 students that had 50% or greater of the low-SES students classified as college-ready.

Over the course of three rounds, the expert principals provided feedback to the researcher as to what characteristics, practices, programs, and other factors influence the college readiness for low SES-students. At the conclusion of round three, consensus was reached among the expert principals, collection ended. The Delphi identified eight

characteristics and five practices that all thirty-five expert principals felt influenced college readiness for low-SES students.

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Chapter 1

INTRODUCTION

In today's society, there are many distinctly unique issues facing the nation's K-16 educational system. Despite the challenges they encounter, schools are still charged with providing all students with a quality education. Many maintain a belief that ensures that students from all backgrounds and situations complete school with competency in skills needed to compete in a global, democratic society (The National Commission on Excellence in Education, 1983). Thus, schools must creatively address and overcome various issues. One distinct issue facing the K-16 educational system in the United States is the successful completion of college by low-SES students.

One of the rising issues in the United States educational system is the preparation of students to successfully transition from K-12 to college. In fact, poor students are particularly showing negative progress in the area of college readiness (Alliance for Excellent Education, 2006; Brinson, Kowal, & Hassel, 2008). Forty percent of the students in two or four year colleges are qualifying for remedial course work (U.S. Department of Education, 2010). Many employers are also concerned with the limited skills students have upon completion of high school (U.S. Department of Education, 2010). This situation is causing a clear movement to support increasing the number of college-ready students. President Obama has led efforts to increase funding and support new legislative proposals that demonstrate possible increases in college and career readiness. In President Obama's plan, states will be required to adopt national standards

or certification of college and career readiness before accessing federal funds (TEA, 2010c).

The goal of the American educational system is for every child to complete high school with the academic skills necessary to be successful in college (Cobb, 2004; Conley, 2008; Sunderman, Kim, & Orfield, 2005). Closing the achievement gap by providing a quality education is imperative to equality for all students (Borkowski & Sneed, 2006; Darling-Hammond, 2006). According to a study conducted by American College Test (ACT) (2005), seven out of ten United States high school students will graduate lacking skills needed to be successful college freshmen. One factor contributing to this finding is that more non-traditional students are attending college. Non-traditional students are those who are not transitioning directly from high school to college or students who are generally unrepresented in college (Conley, 2011). In fact, the number of traditional and non-traditional students have increased; however the number of minority and low income students is remarkably high (Haycock, 2010).

To measure the alignment of the Texas College and Career Readiness Standards, and the National Common Core College Readiness Standards created by the Council of Chief State School Officers (CCSSO) and the National Governors Association (NGA), groups of higher education educators, public school educators, and content specialists conducted an audit. The results of the audit showed that Texas College and Career readiness Standards met or exceeded national standards (TEA, 2010c). In fact, Texas was the first state to recognize the importance of college and career standards and the effect that high school classes have on student success in the college or university. The audit

also revealed that the Texas standards in many areas cover more areas of college readiness than the national standards (Texas College and Career Readiness Standards, 2010).

Forty percent of the 2003-04 high school seniors who enrolled in a four-year college by 2006 were required to take a remedial class, and 51% of the students enrolled in a public two-year college were required to take a remedial class (National Center for Education Statistics, 2010). Because these students are academically behind, the risk of them dropping out of college is greater (National Center for Education Statistics, 2010). The estimated cost of remedial education is $1.4 billion per year, and the effect of the lost earning potential is estimated to cost the nation's domestic product $2.3 billion a year (Alliance for Excellent Education, 2006). The students who do not complete college will also require additional funds to provide additional training to advance their careers. In fact, almost 80% of the job openings in the next 10 years will require some type of specific training or college training (Holzer & Lerman, 2009). Thus, the knowledge required to successfully achieve employment is increasing. Students who graduate from high school need to graduate prepared to successfully complete college or successfully enter the workforce.

One of the primary roles of a high school is to prepare students for success in college. In this effort, high schools identify students or groups of students who are experiencing difficulty in academic areas. In general, low socioeconomic students (SES) are less college-prepared when they complete high school (ACT, 2005; Education Trust,

1999). There has been an ongoing debate regarding the appropriate intervention needed to support an increase in academic success for these students (Education Trust, 1999).

As students prepare to be competitive in a global society, it is imperative that actions be taken on multiple levels to ensure that students leave high school with the skills necessary to be successful in college. One of the primary reasons students are unsuccessful in college is the differentiation of the level of rigor required to be successful in high school and in college. Many students describe the high school and college experience as being totally different with respect to the academic rigor they encountered in high school (Conley, Aspengren, Stout, & Veach, 2006). To prepare high school students for college, the K-12 curriculum and graduation requirements must be aligned with college standards, more students must be exposed to more rigorous courses, such as Advanced Placement courses, and high school exit exams must be aligned to reflect college readiness (Adelman, 2006; Dounay, 2006).

Statement of the Problem

Statistics presented by the U.S. Department of Labor indicate that 90% of the jobs that will be available for current students will require some post-secondary education (U.S. Department of Education, 2006a). Despite the increase in the number of students attending college, many students are not college-ready (ACT, 2011; Conley, 2007a; Roderick, Naganka, & Coca, 2009). This problem is more prevalent for economically disadvantaged students (Roderick et al., 2009). In 2004, over 66% of all high school graduates went directly to college and 75% went to college within five years of graduation (National Center for Education Statistics, 2004). Unfortunately, statistics

indicate that approximately 65% of the students who entered college in 1998 had not completed their bachelor's degree in four years (Knapp, Kelly-Reid, & Whitmore, 2006).

Although more students are attending college, many are not prepared for the academic challenges of college. The literature regarding college readiness supports that low-SES students are more academically prepared in smaller schools (Howley, 1996; Stewart, 2009). This current study explored and identified characteristics, practices, and programs of smaller Texas high schools that successfully produce college-ready low-SES graduates.

Purpose of the Study

Although there are studies on college readiness and small school success (Fryer & Levitt, 2004; Howley, 1996; Howley & Howley, 2004; Orfield, 1997; Stewart, 2009), virtually no research exists that focuses on small Texas high schools that produce high percentages of college-ready low-SES students. The purpose of this study was to investigate characteristics, practices, programs and other factors of smaller Texas high schools that are successful at producing college-ready low-SES graduates. The analysis of the data provides insight into the characteristics, practices, programs, and other factors that influence low-SES-students college readiness.

Rationale

Educators must be knowledgeable in providing a quality education to students from diverse backgrounds. Educators must also be familiar with providing different opportunities for students to be successful learners who can matriculate though college. The financial future of students from low-SES families is affected by their ability to

attend and graduate from college (Harris, 2007; Holzer & Lerman, 2009). Thus, educators must identify characteristics, programs, and practices that result in increased academic successes for low-SES students. Without identifying and utilizing effective strategies, low-SES students will not have full access to success in high school and beyond.

The jobs for which today's students will compete will require at least some college education (Holzer & Lerman, 2009). Thus, educators must be prepared to provide students with an education that prepares them to be successful in college. It is critical that schools identify, monitor, and change strategies when they are not successful to ensure the college readiness of specific groups of students like low-SES students. This means that educators must have an understanding of how to educate low-SES students and knowledge of strategies that lead to increased college readiness in this population of students. These practices will increase the number of low-SES students attending college, improving their quality of life, and ultimately producing a more prepared diverse workforce (Holzer & Lerman, 2009; Rivkin, Hanushek, & Kain, 2005; Silva, 2008).

Research Questions

The research questions investigated are:

1. What programs does your school have that increase the number of college-ready low-SES students? Why?
2. What characteristics does your school have that increase the number of college-ready low-SES students? Why?

3. What practices does your school have that increase the number of college-ready low-SES students? Why?
4. What other factors do you think increase the number of college-ready low-SES students? Why?

Theoretical Framework

This research explored the perceptions of principals regarding the characteristics, practices, programs, and other factors that produce college-ready economically disadvantaged students in small high schools. There are two theories that served as the overarching framework for the research: *Structuralism and culturalism*.

First, structuralism theory emphasizes that a person's environmental surroundings and experiences determine their life possibilities (Blackburn, 2008). The environmental surroundings and experiences are the overarching structure that creates a person's culture. Utilizing this lens, the research considered the SES of the students as well as the size of the high school. Second, culturalism theory emphasizes that a person's attitude, interpretations, and actions are formed by the person's family, community, and/or groups/organizations (Eriksen & Stjernfelt, 2009). Utilizing this lens, the research considers the best practices that are a part of the culture of small high schools in relation to the college readiness of economically disadvantaged students.

From an organizational framework, structuralism is viewed as shaping the actions of an organization by the social and cultural process (Scott, 1995). This framework considers the overarching cultural processes and their meaning to the formation of an organization (Meyer et al., 1987; Scott, 1995). Scott and Davis (2007) describe a view of

an organization as a system composed of many different interdependent parts. These interdependent relationships influence the organizational behavior. Structuralism of an organization's social structure includes the social structures that contribute to the shaping of an organization (Scott, 1995).

Significance of the Study

This study is important to the education system because it provides knowledge and information about producing college-ready low-SES students. Because the workforce of today and tomorrow requires ever-changing skills, students will need to continue education beyond high school. The K-12 education system is facing measureable challenges with graduating students who are prepared to enter and matriculate through college (National Commission on Excellence in Education, 1983; Texas, 2007; U.S. Department of Education, 2004). Although more students are attending college, the percentage of the students who are graduating prepared to be successful in college is declining. The percentage of students who are college-ready, as measured by assessments such as ACT, SAT, and Texas Assessment of Knowledge (TAKS) demonstrates that there is a disconnect with respect to student expectations between high schools and colleges (ACT, 2009; College Board, 2011; TEA, 2010c).

There is a measureable achievement gap in the United States between low-SES students and the majority students (ACT, 2009; College Board, 2011). Research shows that low-SES students are more academically successful in smaller schools (Fryer & Levitt, 2004; Howley, 1996; Orfield, 1997; Stewart, 2009). Despite this research, school districts continue to operate larger high schools.

The findings of this research will add to the current body of knowledge concerning preparing low-SES students for success in college. The identification of effective characteristics, practices, programs, and other factors will add to the existing body of research and provide school leaders research-supported information when making decisions.

Method

This study utilized a Delphi research technique to explore principals' perceptions of characteristics, practices, programs, and other factors that influence college readiness for low-SES students in smaller Texas high schools. The Delphi research technique was introduced in the late 1950s by two Rand Corporation researchers (Ludwig, 1975). The Delphi research technique is used to reach a consensus by a group of experts on particular topic by focusing on responses to questions during a survey process comprised of a limited set of rounds (Clayton, 1997; Linstone & Turoff, 1975). Linstone and Turoff (1975) stated that the Delphi technique provided a structure for communication among a group of experts while providing feedback on experts' contribution of ideas, assessment of consensus, an opportunity for experts to reflect on views, an opportunity to change views, and anonymity of individual responses.

Invitation emails were sent to 189 principals that qualified to participate in this study. Thirty-five expert principals of Texas high schools, whose schools had less than 1,000 students and had more than 50% of the low-SES students college-ready as measured by the Texas Education Agency (TEA), completed three rounds of surveys via Survey Monkey to reach consensus. The expert principals were assured that their

feedback would remain confidential and that the reporting of research results would protect their anonymity. The goal was to obtain at least 30 participants to effectively reach consensus (Linstone & Turoff, 1975).

Treatment of Data

In this research study, data were collected to determine consensus among experts on items identified as influential to low-SES students' college-readiness. The collected data were evaluated throughout the research process to determine consensus and changes in consensus of experts over the rounds. This information was utilized to report movement toward consensus as well as to identify a stopping opportunity in the technique. After the completion of the rounds, analysis of the final consensus was conducted.

The design of this study produced consensus in three rounds. Changes in the ratings of the experts were evaluated each round using different measures. To progress toward group consensus, the mean and standard deviation were computed for each item generated from the experts. The information from Round two was analyzed by computing the mean and the standard deviation for each of the items. The items with a mean of four or greater proceeded to Round three. In Round three, information was analyzed by asking the experts if they agreed or disagreed that the item influenced the college readiness of low-SES students. The items that received all agree were identified as receiving consensus of the experts as an influence on college-readiness of low-SES students in smaller Texas high schools.

Definition of Terms

1. *Texas Academic Excellence Indicator System (AEIS):* The AEIS collected a wide range of information on the academic performance of students, schools and districts annually. These reports also provided extensive information on staff, finances, programs, and demographics for each school and district.
2. *Campus Size*: The campus size was defined as the number of students reported enrolled at individual high school campuses by the TEA on the annual October 31st snapshot date. The snapshot is the day when the Texas Education agency takes an overview of the schools.
3. *Delphi Research Methodology*: A research method where experts in a specific field provide information in repeated rounds. This process does not bring the participants together, thus eliminating peer pressure.
4. *Socioeconomic Status (SES)*: The economic and social class of a person or a group of people, often associated with the education and income. Low socioeconomic status (low-SES) is living in low-income situation and qualify for the free or reduced lunch program.
5. *Texas Assessment of Knowledge and Skills (TAKS)*: A comprehensive testing program for public school students in the state of Texas in grades three through eleven. The TAKS was designed to measure the extent a student mastered the designated state curriculum standards (Texas Education Agency, 2010e).
6. *Texas Education Agency (TEA)*: The Texas Education Agency (TEA) is composed of the Commissioner of Education and agency staff. Along with the

State Board of Education (SBOE), the TEA guides and monitors activities and programs related to public education in Texas.

Assumptions

The following are the assumptions of the study:

1. The experts understand the scope of the study and the terminology utilized to gather information.
2. The experts are proficient, objective, and honest when responding to surveys.
3. The interpretation and analysis of the data reflect with fidelity the intent of the experts.
4. The methodology utilized in this study provides an appropriate and logical design for this study.
5. The principal experts in this study will be able to successfully reach agreement on characteristics, practices, and programs that increase the number of college ready low-SES high school graduates.

Limitations

The following are the limitations of this study:

1. The sample of principals that agree to participate may not reflect the felling of all the principals that qualify to participate. Thus, the results are limit to the opinion of the principals that choose to participate.
2. The college readiness data included only 11^{th} grades. All school students are tested in the state of Texas, but college readiness information is only reported on 11^{th} graders.

3. The study will be limited to high school campuses with less than 1,000 students. The study will be limited to campus enrollment numbers reported by TEA in 20011.

Chapter Summary

This study identified characteristics, practices, programs, and other factors of smaller Texas high schools that are successful at producing college-ready low-SES graduates. The analysis of the data provides insight into the characteristics, practices, programs, and other factors that influence the college readiness of low-SES students. High school graduates face many complicated issues in their efforts to be successful in college. The majority of the jobs for which current high school graduates are preparing will require a higher level of education. As students are preparing to be competitive in a global society, it is critical that schools design programs to increase student success.

Chapter 2

LITERATURE REVIEW

This study explored characteristics, practices, programs, and other factors of smaller Texas high schools that are successful at producing college-ready low-SES graduates. The purpose of the literature review was to provide an overview of the identified topics related to the college readiness of low SES students. Social justice in education and the academic achievement gap of low SES students has been extensively studied in education. Federal and state accountability models, including the No Child Left Behind Act (2001) and the Texas Testing and Accountability Model were designed to help ensure all students received an equitable education. The problems researched in this study were multi-faceted with extensive history, and required an in-depth analysis. This chapter included a review of literature which involved the following constructs: (a) social justice in education, (b) college readiness and the workforce, (c) measuring college readiness, (d) educational persistence, (e) the achievement gap, (f) school size, (g) academic intervention programs, and (h) landmark legal cases and policies.

Social Justice in Education

The concept of social justice dates back centuries to the era of Plato and Aristotle. Aristotle emphasized the importance of distributive justice, which means that a society could ensure that the burdens and benefits were distributed evenly based on the good of all members of the society. Plato developed theories of social justice and education. Plato stated that education was a mean of changing desires and leading people to true

happiness. Plato felt the only way to accomplish this was for education to shape the rational part of one soul and everyone desired to have access to a just and rational soul (Griffiths, 2003).

Social justice in education can be identified in many areas. Griffiths (2003) states social justice could be related to issues regarding gender, environment, race, and social class in education. To develop citizens that are the skills, knowledge and abilities to be productive contributors to society, the education system must value the importance of social justice in education (Griffith, 2003; Wade, 2001).

In *Teaching for Diversity and Social Justice,* Adams, Bell, and Griffin offers a definition of social justice:

> We believe that social justice education is both a process and a goal. The goal of social justice education is full and equal participation of all groups in a society that is mutually shaped to meet their needs. Social justice includes a vision of society in which the distribution of resources is equitable and all members are physically and psychologically safe-determining (able to develop their full capacities), and interdependent (capable of interacting democratically with others). Social justice involves social actors who have a sense of their own agency as well as a sense of social responsibility toward and with others and the society as a whole. The process for attaining the goal of social justice we believe should also be democratic and participatory, inclusive and affirming of human agency and human capacities for working collaboratively to create change (p. 3-4).

Another view of social justice in education is offered by Maxine Green in *Teaching for Social Justice* (Ayers, Hunt, & Quinn, 1998):

> Teaching for social justice for the sake of arousing the kinds of vivid, reflective, experiential responses that might move students to come together in serious efforts to understand what social justice actually means and what it might demand, that means teaching to the end of arousing a consciousness of membership, active and participant membership in a society of unfulfilling promises. (p. xxx).

A challenge facing the education system that leads to inequities is the status quo of education (Oakes, Quartz, Ryan, & Lipton, 2000). Educators and policymakers struggle to reach consensus on issues that would progress the current education system. One of the results of the struggle has been that the educational needs of economically disadvantage students are not being met (Oakes et al., 2000). Addressing this issue requires stakeholders to examine their traditions, beliefs, assumptions, and realities to challenge the status quo and build a socially just education system.

College Readiness and the Workforce

Just as social justice plays an important role in the current state of education, educators face many complicated issues in the effort to prepare students for success in college. In our current economic situation, the employers are work force are demanding a higher level of education for employees. Statistics presented by the U.S. Department of Labor indicate that 90% of the jobs that will be available for current students will require some education beyond high school (U.S. Department of Education, 2006). In fact, 73%

of the fastest growing jobs from 2006 to 2016 will require some post K-12 education (Dohm & Shniper, 2007). In 2004, over 66% of all high school graduates went directly to college and 75% went to college within five years of graduation (National Center for Education Statistics, 2004). However, Knapp, Kelly-Reid, Whitmore and Miller (2007) found that only 35% of students who entered college in 1998 had completed their bachelor's degree in four years.

Higher education is the gateway to achieving the American Dream. Persons who obtain a four-year degree earn two-thirds more than high school graduates (ACT, 2011; U. S. Department of Education, 2006). Terenzini (2001) found that attending college has a positive effect on a person's life, as the social and financial benefits are why so many adults have obtained a formal education. As students are preparing to be competitive in a global society, it is imperative that actions be taken on multiple levels to ensure that students are leaving high school with the skills necessary to be successful in college.

If certain populations are underrepresented at the college and university level, the workforce will reflect the underrepresentation. The college-going rate of low socioeconomic (SES) students is behind that of higher SES students. In fact, the most underrepresented group at the college or university level is low-SES students (ACT, 2011; Adelman, 2006; College Board, 2011; Conley, 2003; Conley, 2007a; U.S. Department of Education, 2004). Furthermore, of the students enrolled in higher education in 2002, 98% were from high-income families, 56% were from middle-income families, and 34% were from low-income families (U.S. Department of Education, 2004).

One of the primary reasons students are unsuccessful in college is the differentiation of the level of rigor required to be successful in high school and in college. Many students describe their high school and college experiences as being vastly different (Conley, Aspengren, Stout, & Veach, 2006). To successfully prepare high school students for college, the K-12 curriculum and graduation requirements must be aligned with college standards, more students must be exposed to more rigorous courses such as Advanced Placement courses, and high school exit exams must be aligned to reflect college readiness (Adelman, 2006; Dounay, 2006). It is also imperative to expose high school students to non-academic skills that are essential for college success.

The American College Testing (ACT) Organization (2011) has defined college readiness as "the acquisition of the knowledge and skills a student needs to enroll and succeed in credit-bearing first-year courses at a postsecondary institution (such as a two or four year college, trade school, or technical school) without the need for remediation" (p. iii). In literature related to college readiness, there is a correlation that relates a student's success in high school courses and a student's success on college entrance exams to their college readiness (ACT, 2011; Conley, 2011). In the process of determining if a student is college-ready, colleges will review the names of courses, the perceived level of difficulty of the course, and the number of courses required for high school graduation (ACT, 2005; Conley, 2011). The colleges will then use that information to make a determination of the likelihood of a student's success in college. Thus, the current communication system between high schools and colleges is structured around the course names, grades, and scores on entrance exams. This communication

system does not allow high schools and colleges to communicate regarding the knowledge and skills the courses should provide for students to be successful in college. Considering the expectation that all students should be college-ready, K-12 and post-secondary institutions must communicate to ensure that the necessary knowledge and skills are presented (Adelman, 1999; Conley, 2008).

From an operational perspective, college readiness is "the level of preparation a student needs to enroll and succeed-without remediation-in a credit-bearing general education course at a post-secondary institution that offers a baccalaureate degree or transfer to a baccalaureate program" (Conley, 2011, p. 5). Conley goes on to define success as the ability of a student to complete a college level course with a passing grade. Thus, the student will continue from the freshman level courses and continue to be successful in college classes.

There are key cognitive strategies needed for a student to be successful in college. These key cognitive strategies are skills that lead to academic and intellectual behaviors that significantly increase the chance for success in college for students (Conley, 2011). Conley (2011) identifies "content knowledge and basic skills; core academic skills; non-cognitive skills and norm of performance; and college knowledge as elements that are essential to college success" (Conley, 2007, p. 8). The content knowledge and basic skills are obtained from a student's high school experience (Conley, 2007). These elements focus on subject knowledge and are demonstrated when a student meets graduation requirements. An understanding of the key content knowledge essential for college

success can be very useful to K-12 educators when preparing students for college success.

Core academic skills, such as problem solving and oral communication, are the skills that are not directly related to subject knowledge, but are skills that greatly increase the opportunity for student success (Conley, 2007). When students enter college, it is imperative that they be able to perform such tasks as drawing conclusions and conducting literary critiques. The National Research Council (2002) found that college professors expect students to enter college with the competence to perform skills such as analyzing documents, interpreting results, supporting an argument with evidence, and conducting basic research. The core academic skills are in need of additional development by high schools (Conley, 2007).

To prepare students for success in college, states have worked to provide a more rigorous curriculum, increased graduation requirements, and incorporated state level accountability testing (ACT, 2011; College Board, 2011; Conley, 2008). This practice assumes that if the courses are more rigorous and inspected by assessment, more students will be fully prepared for college. Because of the lack of correlation between the taught curriculum and the assessments, it should not be assumed that successfully passing the test is positively correlated to a student becoming successful in college (Cobb, 2004; Conley, 2008; Marzano, Pickering, & McTighe, 1993; Mass Insight Education and Research Institute, 2007). Individual state assessments have been successful in identifying the weaknesses in knowledge and skills, however the critical issue concerns that extent to which those indicators are correlated to students being college-ready

(Adelman, 2006; Conley, 2007, 2008). In recent years, high school graduation requirements have increased nationally, but the percentage of students requiring remedial classes has remained steady (Conley, 2008). It is imperative that colleges research and provide information on core skills to K-12 leadership. The K-12 leadership should then develop strategies for integrating those core skills into the various disciplines.

Students begin the process of developing non-cognitive skills in high and even lower grades. Student behaviors, such as time management and social skills, which greatly affect student success, are referred to as the non-cognitive skills and norms of performance, as these are the skills that allow students to successfully navigate a new environment (Conley, 2007). Success in this area requires self-awareness of one's abilities and limitations. So students must then be able to compensate for areas of weakness and capitalize on areas of strength. Providing developmental opportunities in this area can be difficult because student support systems in high school and college are very different. It is imperative for high schools to provide opportunities for students to develop these cognitive skills and norms. Since college freshmen benefit from mentor programs and identified small support groups, high schools must educate students on how the college support system is different from the home support system and provide them with examples of how to be successful in college.

Providing students with opportunities to obtain college knowledge in high school is a way increase student success. College knowledge refers to the general knowledge that a student has about college programs and processes such as college admission and financial aid (Conley, 2007). The complexities of college can influence a student's

success. This knowledge includes applying to college, accessing financial assistance, and interacting with college professors (Conley, 2007).

Students mainly utilize knowledge obtained during high school to take college entrance exams. Student performance on college entrance exams is affected by more than academic abilities. The development of the college entrance exams is based on a set of skills essential for a student to be successful in college. The assessors then assign a value to a student's performance and correlate that value to the student's probability of success in college. The student's performance on college entrance exams does not consider the student's effort or intervention supports (Cobb, 2004; Conley, 2008, 2011).

Many freshmen arrive on college campuses without many of the skills necessary to be successful. Students entering college are generally leaving their families for the first time, as well as entering an institution with different rules from those enforced in their K-12 experiences (Conley, 2011). The Standards for Success (2003) reported that in a college course, students are expected to read from eight to ten books; however high school students are expected to only read one to two books. College professors report that many freshmen do not spend the appropriate amount of time preparing for college-level coursework (National Survey of Student Engagement, 2006).

Even with the increase in the number of students attending college, many are not academically prepared to be successful in college (Alliance for Excellent Education, 2006; Conley, 2003; Kannapel & Clements, 2005; Roderick et al., 2009). From a national point of view, addressing this problem is economically important because college-ready

students are more prepared to meet the demands of the job market and make a positive, productive mark on society.

The knowledge and skills necessary to be accepted and successfully matriculate to a college varies widely. Colleges do not have a system in place to measure or determine the content or level of rigor of most high school courses (Conley, 2008). Colleges rely on such programs as College Board's Advanced Placement program and the International Baccalaureate program to at least determine that the standard is higher than college-ready standards (College Board, 2011; Conley, 2008). The 2006 Commission on the Future of Higher Education identified successful completion of high school as a critical factor in increased access to and successful progress in college (U.S. Department of Education, 2006). To increase both access to and success in college, former Department of Education Secretary Spelling recommended focusing efforts on appropriately aligning the K-12 curriculum and standards with the skills necessary for success in college (U.S. Department, 2006). In recent years, more states are beginning the process of developing and designing curriculum that not only focuses on high school graduation, but also focuses on the skills necessary to be successful in college. This curriculum development process must continue and should involve a collaborative group of K-12 and post-secondary educators.

In *Public High Schools Graduation and College Readiness in the United States*, Green and Foster (2003) evaluate the graduation rates of high schools across the country, the courses students took while preparing for college, and college classes required for admission. The study indicated that only 32% of students had graduated with the required

courses to enter college. High schools across the country have created programs to increase the success rates of graduates related to college readiness. Many of the special programs were developed to support low-SES students. Research shows that students from higher income families are more likely to attend better schools with better teachers and resources, as this will result in students who are more likely to be college-ready (Kannapel & Clements. 2005; Kilgo, 2010; Levine, 1998). This is the reason many school districts are developing curricula that have a K-16 focus.

College educators often place blame for students not being successful in college on the K-12 education system. However, this is unfair because colleges have failed to establish benchmarks for student success in college (ACT, 2011; Conley, 2008, 2011). Colleges should play a major role in collaboratively with K-12 educators to develop high school programs that match college expectations.

Measuring College Readiness

While current college readiness levels have been shown to be lower than desired, states have recently subjected student achievement to strict and careful measurement. To measure the quality of education, many states have developed state assessment programs. Many of these states, including Texas, have used these state assessment results to measure college readiness. In fact, by 2012, more than half of the states will have state assessments with standards associated with graduation in place. Because measuring college readiness is a major concern of education policy makers and curriculum leaders, most states are developing assessments that have a measure of college readiness (Hamilton et al., 2007; Kober et al., 2006).

For a student to be a 2010 graduate in the state of Texas, the student has to score at least 2100 on the Texas Assessment of Knowledge and Skills (TAKS) state assessment in English language arts, math, science and social studies. Students who have a scale score of 2200 or higher in English language arts and mathematic are recognized as having the academic skills to be successful in college level course work (TEA, 2010). Because of the structure of knowledge, students need to be exposed to college as soon as possible. Research shows that middle school is the most operative time to expose students to college information (College Board, 1994). Furthermore, the middle school experience significantly influences the students' success in high school.

The Scholastic Assessment Test (SAT) and the American College Test (ACT) are national standardized test that are utilized by colleges and universities all over the country when making college admission decisions, as the results are used to reduce the number of students selected. These tests do not measure achievement; they generally measure aptitude (ACT, 2011; College Board, 2011). Thus, college admission decisions are often based on the cognitive level of the students.

Each year, the ACT organization issues a report based on the highlights from the test performance of the students that took the ACT. The information in the report is organized to focus on student test performance as related to college readiness, the number of graduates exposed to college entrance testing the race/ethnicity participation percentage, percent of students pursuing a core curriculum, the impact of rigorous course work on achievement, the percent of students meeting ACT college readiness benchmark

scores in each content area, the extent to which students' aspirations match performance, and college and universities to which students send test results (ACT, 2009).

There are several research studies on academic achievement gaps between low-SES students and students that are higher-SES (Alexander, Entitle, & Olson, 2007; Crosby, 1993; EdSource, 2006; Lee & Wong, 2004; McClure, 2008). Research finds that students in homes with less than $20,000 annual income score 434 on the critical reading portion of the SAT compared to students in homes with more than $200,000 annual income score 568 (College Board, 2009). According to research, students in homes with less than $20,000 annual income score 457 on the mathematics SAT compared to students in homes with more than $200,000 annual income score 579. Students whose annual household income is less than $20,000 earn a composite score of 891 and the household incomes above $200,000 earn a composite score of 1142 (College Board, 2011)

Research shows that the courses taken in high school significantly impact success in college (Adelman, 2006; Conley, 2006; EdSource, 2006). While students should be guided to select classes that are college preparatory in design, many students select courses that they perceive to be easy (Conley, 2006, 2008). This attitude has developed over time and is often the result of a focus on grades and extracurricular activities (Bennett et al., 2004; Conley, 2006). Adelman (1999) found that students who take less rigorous courses are less likely to complete college and are not as productive in the workforce as the students who took rigorous course work.

The National Governors Association and the Council of Chief State School Officers authored the 2010 *Common State Standard Initiative*. The primary goal of the initiative was for education reform by developing a rigorous content focused and skills framework for states. The initiative also sought to align K-12 education, while focusing on college readiness expectations, the development of critical and analytical thinking skills, and improving performance on national assessments.

Through a collaborative project in 2009, the U. S. Department of Education and the Institute of Education Science published *Helping Students Navigate the Path to College: What High Schools Can Do*. This publication provided implementation ideas for high schools to increase the number of college-ready students. The American Diploma Project (ADP) was founded in 2005 with 13 states to actively close the achievement gap in schools. The project was the collaborative efforts of Achieve, Inc., the Education Trust, and The Fordham Foundation (Achieve, Inc. 2009). The project produced *Closing the Expectation Gap* to outline and highlight the national progress being made with improving the college-ready situations of students (Achieve, Inc., 2009). In 2009, the project reported that 23 states had aligned their standards with the recommendations of ADP. It also reported that 21 states and Washington D.C. required students to obtain a college and career-ready diploma. Ten states required student assessment to be aligned to college and career standards, and 23 states have aligned exit level tests with college and career standards. Additionally, all 50 states will have a longitudinal accountability system in place (Achieve, Inc., 2009).

Educational Persistence of Low SES Students

While college-readiness has received heightened focus at the secondary level, researchers have also studies aspects of motivation that lead to persistence. The motivation of low SES students is a key factor in achievement and persistence (Conley, 2003, 2008; EdSource, 2006; Herman et al., 2008). The motivation of a student can be measured by the student's behavior as it relates to what the student aspires to obtain. Students are motivated for various reasons. Some are motivated to acquire knowledge, while others are motivated by the external signs of success, such as grades and college acceptance (Adelman, 1999; Conley, 2003, 2007a; Duke, 2006; Lindsey, 2009).

There has been research conducted on the factors that lead high school graduates to go on and successfully complete college. In a study conducted by the U.S. Department of Education, it was found that it takes the average student five years to complete college (Adelman, 1999). This study also indicated that one-third of the students completed bachelor's programs within four years from the same college (Adelman, 1999). A factor that was identified as having a direct correlation with college persistence is high school behavior. The primary factor identified as related to high school was the sequence of math classes completed by a student. The higher the math class a student completed, the better their chance of completing a bachelor's degree, with Algebra II being the gateway class to a bachelor's degree (Adelman, 1999).

While the rigor of secondary curriculum has been shown to positively correlate with subsequent success, parental expectation has been shown to influence student success. Research indicates that students are more successful in school when their parents

play an active role in their education (Schneider, 2003; Seginer, 1983). In the context of education, parental involvement is defined as the future desires or current expectation that parents have for their children's academic performance (McDonough, 1997). Parents maximize the academic success of their children when they are involved in education before the child enters school and remain consistently involved (Epstein, 2001). The school and home partnership promotes a learning environment that is effective in providing successful educational opportunities to students. When the parents are involved, students are more likely to be prepared to attend school and demonstrate appropriate behavior (Epstein, 2001). To prepare high school students for college, parents must be involved in the high school years of their student's education (Conway & Houtenville, 2008). Jackson and Davis (2000) report that parents become less involved in school as their students grow up. However, to produce college-ready graduates and parents must consistently be involved.

Many low income parents desire to be involved, but lack the knowledge of how to be involved in the education process (Epstein, 2001). One of the primary issues for these parents is that they are unaware of how to be involved in the education process (Epstein, 2001). In fact, many of the parents who struggle in this area are also intimidated by the school staff and do not feel welcome at the school. Addressing issues that prevent low income parents from being involved, in large part, falls on the school. Schools must create atmospheres that are inviting to parents and that encourage parental involvement (Epstein, 2001).

Jeynes (2007) found that parental involvement increase student achievement. However, the increase in student achievement is often impacted by race and SES status of the family (Jeynes, 2007). Although parental involvement positively influenced the academic achievement of all students, White students from economically advantaged families saw the greatest increase (Jeynes, 2007). Another study found that children are raised in families with two parents have higher levels of academic achievement (Chester, Jones, Zalot, & Sterrett, 2007). Chester et al. (2007) described how these students from two parent families have stronger emotional support systems and more economic resources to support education. The educational level of the parents was also found to be an effective indicator of a student's academic success (Chester et al., 2007).

To increase and encourage parental involvement, schools must intentionally develop family and school relationship partnership programs (Epstein, 2005). A family and school partnership exists when the school and the family work collaboratively to improve educational opportunities for the student(s) (Christenson, Palan, & Scullin, 2009). Schools must identify and address issues that prevent parents from participating in the partnership. The barriers include cultural sensitivity, English language barriers, and socioeconomic issues (Christenson et al., 2009).

While parental expectations influence student's academic success, students from economically disadvantaged families are often under-represents in colleges. Limited financial resources play a major role in low-SES students attending college. Many of these students select colleges or universities that are close to their homes to lower the cost of higher education (Smith & Bers, 1989). These students will live at home and avoid

such challenges as finding a new job and searching for housing. Many low-SES students are often first-generation college students. First-generation college students often struggle to find their place on college campuses, so living and being surrounds by familiar things is a positive choice for them (Smith & Bers, 1989).

While the academic success of a student can be affected by things like school size and the economic status the family, a positive supportive relationship with a teacher is important. Teacher perception has an influence on the academic success of students. In fact, the amount of time a teacher devotes to a student has a correlation to the socioeconomic status of the student (Carter, 2003; Farkas & Grobe, 1990; Rist, 1973). Research indicates that a majority of teachers are from higher social status, and most of these teachers are white females; furthermore, they find it challenging to relate to low-SES students (Farkas & Grobe, 1990). Teachers tend to find communication easier or more natural with students backgrounds similar to their own. Consequently, this generally leads to the teacher providing students with background similar to theirs with more attention and perceiving them to be more than students of different backgrounds. Ultimately, the teacher discriminates against the low-SES students because the students lack cultural knowledge (Farkas et al., 1990). To increase the educational opportunities of low-SES students, it is imperative that the teacher transfers cultural knowledge to the students in the form of academic and behavioral skills. Teachers have the ability to remove the barriers that often impede the academic success of low-SES students.

Statistics indicate that five times as many high-SES students attend college as compared to low-SES students (Terenzini, 2001). Students often determine the education

aspirant level based on their SES level (Terenzini, 2001). Because low-SES families do not typically have the college knowledge and may be exposed to limited college knowledge in high school, many low-SES students choose to forego college. Furthermore, low-SES students are often in schools where the teachers are not highly qualified (Kannapel & Clement, 2005; Lindsey, 2009). This issue can lead to the low-SES students not being exposed to the level of rigor needed to develop skills essential for college success.

The Academic Achievement Gap

While schools across the nation are doing different things to improve the academic performances of low SES students, one of the most pressing issues facing education today is the achievement gap that exists between different student groups (Bennett et al., 2004). This achievement gap is prevalent in academic achievement, high school persistence, college persistence, college acceptance rates, and education success rates measured by SES. This achievement gap creates situations where students are not prepared for college success and ultimately can affect some students' quality of life by limiting employment opportunities.

This achievement gap in student performance is defined in education as a disparity in academic performance between groups of students (Bennett et al., 2004). These student groups can be described in different ways, but are generally based on student ethnicity and SES. In the state of Texas, the student ethnicities/categories utilized for state accountability are White, African American, Hispanic and Economically Disadvantaged (Texas Education Agency, 2010).

Different scholars define the achievement gap in different ways. The Texas Education Agency (2010) and the U.S Department of Education define the achievement gap as by comparing the performance on standardized tests of low income and minority children students to their peers. Margret Kilgo (2010) defines the achievement gap as an equality gap where a 10% or greater achievement difference is present between two student groups. Lee (1998) measures the achievement gap in relation to the whole school versus that of an ethnic group or socioeconomic group. Even though the definitions of the achievement gap are slightly different, the consistent concept is a focus on the achievement of all student groups.

In most situations, an achievement gap determination has been based on a comparison of a particular student group to the white majority group (Lee, 1998, 2002). Because of the increase in diversity, this comparison is not always appropriate (Lee, 2002). In fact, an achievement gap can exist within an ethnicity or SES group (Lee, 2002). Lee (1998) cites that a student's SES status plays a significant role in the academic performance of the student and often results in an achievement gap. In many cases, because of limited funds, low-SES students attend schools with limited resources, and are more likely to have to deal with such issues as limited health care and limited educational expectations set at home (Gold, 2007). In fact, research indicates that poverty significantly affects student academic achievement (Chenoweth, 2007; Herman et al., 2008). In addition, research shows that the SES is a part of many factors that affect the academic achievement of students (Gold, 2007).

Statistics presented by the U. S. Department of Education (2006c), indicate that African American and Hispanic students are more likely to be raised in poverty and have a lower median income than white students. The average income of African American families is 60% of the average income of white families (U.S. Department of Education, 2006a). Balfanz (2009) states that African American and Hispanic students are twice as likely as white students to live in a low-SES situation. Many researchers have concluded that family background affects the academic achievement of students, and that poverty is the primary cause of low-academic achievement issues of any ethnic group (Balfanz, 2009; Sirin, 2005; Viadero & Johnston, 2000). Students from middle or upper class SES families have a higher academic achievement than students raised in poverty. Students from low-SES families are more likely to drop out of high school than high SES students (Balfanz, 2009; Viadero & Johnston, 2000). Furthermore, students from low-SES families enroll in college at a lower rate and also graduate at lower rates than students from middle and upper SES families.

The results of the nation's primary college entrance exams, ACT and the SAT, indicated that there is an achievement gap with student that correlates to ethnicity and SES. ACT (2011) reports that the average composite ACT score is 22.4 for white students, 18.7 for Hispanic students, and 17 for African American students. The mean SAT score has increased for all groups over recent years; however, the increase for African American and Hispanic students is not as large as the increase for white students (JBHE, 1999). The average SAT critical reading score for white students is 528, for Hispanic students is 454, and for African American students is 429 (U.S. Department of

Education, 2011). The average SAT mathematics score for white students is 536, for Hispanic students is 462, and for African American students is 428 (US Department of Education, 2011).

One of the possible effects of the academic achievement gap of low SES students is the increased possible of dropping out of high school. The U.S. Department of Education (2008) defines a high school dropout as a student who is enrolled in a high school in October and not the following school year and has not received a high school diploma or GED. Statistics indicate that white students had a 5.2% dropout rate (U.S. Department of Education, 2011). Low-SES students also have a greater dropout rate, 10.4% compared with 2.5% for upper SES students (U.S. Department of Education, 2004). In comparison of these different groups, low-SES students are dropping out of school at the highest rate.

The U.S. Department of Education (2011) indicates a 38 percent increase in enrollment in post-secondary institutions from 1999 to 2009. The growth showed an increase from 14.8 million to 20.4 million students. Most of the growth came from a 45 percent increase in full-time enrollment and a 28 percent increase in part-time students (U.S. Department of Education, 2011). The number of 18 to 24 year-old college students increased by 14%.

The income of a student's family and academic preparation are key factor in predicting college success (Advisory Committee on Student Financial Assistance, 2001; Martinez, M. & Klopott, S., 2005). In many case, academically talented low-SES students struggle to obtain educations to match their abilities. High achieving low-SES

students attend college at the same rate as low achieving high-SES students (U. S. Department of Education, 2006b). These are low SES students who score in the top quartile on standardize exams compared to high SES students who score in the bottom quartile on standardize exams (U.S. Department of Education, 2006b). The college completion rate is 36% for low-SES students and the college completion rate is 81% for high-SES students (U. S. Department of Education, 2006b). Students are more likely to complete college if they go directly to college from high school (U. S. Department of Education, 2006b; U S. Department of Education, 2011)

School Size

While many things like economic status and curriculum can have a negative correlation on academic achievement of low SES students, smaller school are doing a better job with educating low SES students. Extensive research has been devoted to the relationship between the size of a school and its effect on academic achievement. Although the results vary, large school size is generally associated with declining academic achievement (Cotton, 1996; Johnson, 2004; William, 1990).

A large number of studies indicate that SES and school size have an effect on academic achievement (Brickel & Howley, 2000; Howley, 1996). Research shows that low-SES students are more academically successful in smaller schools (Howley, 1996; Stewart, 2009). The academic achievement of students with high-SES is not affected by school size (Howley & Howley, 2004). However, some research indicates that factors affecting the academic achievement of low-SES students are beyond the control of the school (Fryer & Levitt, 2004; Orfield, 1997). The effect of school size on student

academic achievement is important because school districts can control the size of schools (Caldas, 1993).

Stewart (2009) researched the achievement differences between large and small schools in the state of Texas. He used student performance on the TAKS and school size at different SES levels to determine if there was a relationship with student achievement (Stewart, 2009). The study evaluated the five different sizes of high schools in Texas as set by the University Interscholastic League (UIL). The high performing schools were then placed in quartiles, based on the number of economically disadvantaged students in the school district (Stewart, 2009). In all quartiles, except the one with the lowest percentage of economically disadvantaged students, the students performed better in the smaller schools (Stewart, 2009).

In a nationwide study conducted by Harris (2007), he looked at the effects of SES on academic achievement. The results indicated that schools with high percentages of low-SES students were less likely to have high levels of academic achievement. In a similar study Caldas (1993) used data from Louisiana to look at the effects of ethnicity and SES on academic achievement. The results indicated that ethnicity and SES were strong predictors of student academic success (Caldas, 1993).

Using California Assessment Program data, Friedkin and Necochea (1988) explored the relationship between school size, SES, and academic achievement. The study concluded that academic performance is affected by the size school and the SES of the students. As the campus SES increased, the relationship between academic achievement and size shifted from negative to positive. However, the student found a

negative relationship of low-SES and increased school size. The findings indicated that large schools benefit the academic achievement of high-SES students and that smaller schools benefit low-SES students (Friedkin & Necochea, 1988).

Howley and Bickel (1999) conducted a series of studies that are referred to as The Matthew Project. The studies evaluated the relationship between school size, SES of students, and academic performance of students in Georgia, Montana, Ohio, and Texas. The researchers found that small schools with higher percentages of low-SES students had academic achievement that was almost the same as large schools with the same percentage of low-SES students. The results also revealed that larger schools with high-SES performed better than smaller schools with the same high-SES (Howley & Bickel, 1999).

Although there is no universal agreement on an exact school size necessary to maximize student achievement, on average, researchers suggest that the best size for a high school is from 400 to 800 students (William, 1990). Student achievement in small schools is believed to be the result of various factors. In smaller schools, the numbers make it possible for greater involvement and thus greater ownership by students, faculty, parents, and the community (Cotton, 1996). Research indicates that economically disadvantaged students benefit the most academically from attending smaller schools, while they experience academic harm in large schools (Cotton, 1996).

Academic Intervention Programs

While small schools have been show to increase achievement, particularly for low-SES students, several interventions have been put in place to focus attention upon the

underserved student population. To level the playing field for low-SES students, academic intervention programs must be in place. The purpose of these programs is to provide low-SES students with the skills that are necessary to be successful not only in high school, but in college as well (Swall & Perna, 2002). In recent years, there has been an increase in academic intervention programs that respond to the increase of skills needed for low-SES students to be academically successful. In fact, the state and federal governments have increased initiatives focused on funding programs to support low-SES student success (Cunningham, Redmond, & Merisotis, 2003).

Upward Bound

One of the most prominent interventions went into effect in 1964. President Johnson signed the Economic Opportunity Act as a part of the War on Poverty. Upward Bound was designed to be a college preparation program for low-SES students or first-generation college students. The foundation of the program focused on the belief that low-SES students and minority students do not have the resources to reach their full potential in an educational environment. To meet this critical need, Upward Bound was created to increase the number of low-SES and minority students who successfully attend college (Fashols & Slavin, 1988).

Even though Upward Bound was originally formed to serve educationally disadvantaged students, the first-generation college criterion was added in 1980. Upward Bound currently targets students in grades 9-12 who have experienced some academic challenges and whose families are low-income (Fashols & Slavin, 1988). Since the goal of the program is to increase college-going success, the program provides support with

factors such as the college application process and preparation for college entrance exams. The multi-year program also provides additional services, such as academic counseling, career exploration, enrichment activities, and a six-week summer experience on a college or university campus.

GEAR UP

Similar to Upward Bound, the Higher Education Amendment of 1988 established the Gain Early Awareness and Readiness for Undergraduate Programs (GEAR UP) is a six-year grant program that provides support to underrepresented students so they may gain successful access to college. The grant is available to states and partnerships that provide education to underrepresented students on topics such as early college awareness, academic support, and financial aid for low-SES students (U.S. Department of Education, 2006a). Specifically, the program aligns the K-16 curriculum, eliminates ability tracking, provides summer enrichment summer and after school activities, and offers professional development for school staff (U.S. Department of Education, 2006a).

Low-SES and minority students are identified as being underrepresented at colleges and universities. The GEAR UP grant provides funds to support low-performing schools that serve low-income students and minority students. Based on the cause of low performance, the GEAR UP grant financially supports the initiatives needed to transform the schools to high-performing schools. To support schools, the GEAR UP grant has funded the following services:

A. Mentoring
B. Tutoring

C. Counseling

D. Outreach to teachers and students

E. Parental involvement activities

F. Curriculum support

G. Teacher staff development

H. Assistance with the college application and financial aid process

I. Administration of college entrance exams

The GEAR UP grant funds can be used to support a group of students as long as 50% of the students are eligible for free or reduced lunch or the family income is at or below 150% of the poverty level, and the student starts the program no later than seventh grade and continues through graduation. The state of Texas has been awarded a GEAR UP grant. As the direction of the Governor, the Texas Education Agency manages the GEAR UP grant known as the Texans Getting Academically Prepared Program.

Advancement Via Individual Determination (AVID)

While Upward Bound and GEAR UP represent legislative interventions, Advancement Via Individual Determination (AVID) represents a private attempt to increase college readiness on a national level. AVID is a college readiness system for elementary through higher education that is designed to increase school wide learning and performance. The AVID College Readiness System (ACRS) "accelerates student learning, uses research-based methods of effective instruction, provides meaningful and motivational professional learning, and acts as a catalyst for systemic reform and change" (AVID, 2005). At the high school level, AVID focuses to increase the numbers of

minority and low-SES in advanced, rigorous classes. The AVID didactic practice provides students with the academic and behavioral skills that high-SES obtain from family exposure. The AVID practice has a positive effect on the academic achievement gap that exists between low-SES students and white, middle, and high-SES students (AVID, 2005).

The AVID program targets the students who are performing in the academic middle, generally a 2.5 to a 3.5 grade point average. Even though race, gender, and ethnicity cannot be used as selection criteria for the AVID program, most of the participating students are low-income minorities. The goal of the program is to prepare these students to be successful in college. Mary Catherine Swanson, the founder of AVID, developed the program to provide underrepresented students with the opportunity to be successful in a college prep curriculum (Swanson, 2002; Swanson, Marcus, & Elliot, 2000).

Many schools that employ the AVID strategies utilize them not only with the AVID students, but with all students. School-wide implementation can greatly increase the academic achievement of all students (D'Souza, 2000; Foy, 2002). This then can expose more students to more rigorous learning opportunities.

The AVID curriculum focuses on writing as a tool of learning, inquiry, collaboration, subject specific learning groups, and reading as a tool for learning (WICR). The Cornell note-taking process is a practice that has helped students across many contexts; furthermore, AVID has created an adaptation of this practice to better fit the program's curriculum. This system requires the students to divide the note page into two

columns. The left side is for notes and the right side is for higher order thinking questions. The curriculum also focuses on the inquiry process. AVID students are trained on asking as well as answering probing questions. The ability to generate and answer questions is key to being successful when taking courses that are more advanced than traditional courses. In the collaborative groups, the AVID students learn how to work together to explore, inquire, and solve problems.

Early College High School

Similar to AVID, Early College High Schools (ECHS) serves low-SES students who struggle with the cost of education. Low income students struggle with the cost of a college education. The Early College High School (ECHS) was designed with the goal of providing high school students with the opportunity to obtain an Associate's degree or two years of course work toward a Bachelor's degree. Because this is a part of the high school experience, students receive the college credit at without the cost of college tutor and fees. This concept provides students with limited funds the opportunity to obtain college credits while still in high school. The college-level courses are generally more rigorous and provide students with an educational opportunity that better prepares them for college. In the past, access to college-level course for high school age students was limited to high-SES students. The ECHS program allows a more diverse population of students to obtain college credit while in high school. The program provides a complete continuum of services to support the success of the students. The following are some of the strategies utilized in the ECHS to increase success:

1. School-wide literacy programs

2. Inquiry-based Instruction
3. Lab/Shadow courses that complement the college course (THSP, 2011)

In its establishment, the EHSC priority populations were low-SES students, first generation college attendees, English Language Learners, and minority students. The program wanted to provide an opportunity for underrepresented populations.

Landmark Legal Cases and Policies

Just as education legislation and private programs have impacted college readiness, so too has the American judicial system produced seminal cases that have had direct effect on achievement of low-SES students. Because of the critical implication on society, there have been many notable legal cases and policies developed over the years regarding education. Many of these legal cases and policies involved issues related to social justice involving the quality of education provided to low SES students. These legal case and policies have played a role in shaping our current educational system and affecting the opportunities provided to students.

Brown v. Board of Education of Topeka 1954

The landmark 1950s case, Brown v. Board of Education of Topeka, examined the equality of school facilities in the Board of Education of the City of Topeka, Kansas. The findings of the case proved that separate but equal school facilities were inherently unequal under the Equal Protection Clause of the 14th Amendment of the United States Constitution (Brown v. Board of Education, 1954). Even though this historic case primarily focused on buildings and supplies, it was the gateway case to identifying other educational inequities; furthermore, this case led to the desegregation of schools across

the country (Brown v. Board of Education, 1954). The country began to see public schools change from small homogeneous schools to large diverse schools.

This desegregation of schools resulted in the Americans taking a critical look at human rights as they relate to educational opportunities. No longer would only white children have the opportunity to receive superior educations. The landmark case paved the way for the integration of school in the United States and was a major accomplishment of the civil rights movement (Brown v. Board of Education, 1954).

Elementary and Secondary Education Act 1965

While Brown vs. the Board of Education was an attempt to level the playing field, the Elementary and Secondary Education Act of 1965 attempted to strategically place funding in a manner that would benefit low-SES students. In 1965, President Lyndon B. Johnson signed into law The Elementary and Secondary Education Act (ESEA). This legislation, often call the "War on Poverty", as proposed in response the poverty level being almost 20%. This law sought to provide additional funding to low-SES students in an effort to improve educational opportunities and situations. The law also emphasized equal access to education and established high standards and accountability. The bill aimed to close the achievement gap between low-SES and high-SES and ensure that low SES students receive a fair and appropriate education. The act has been criticized because it did not establish a method to determine if the funding had a positive effect on the academic achievement of low-SES students (Lindsey, 2009).

Equality of Educational Opportunity 1966

In the tradition of the ESEA, the Equality of Education Opportunity Report, also known as the Colman Report, was an in-depth analysis that was conducted to evaluate the educational opportunities of American children. This report focused on 600,000 students in 4,000 different schools. The purpose of the report was to assess the equality of educational opportunities children of poverty and children of different races. The report found that school funding had little effect on educational quality. In addition, it reported that black and white children where educated in similar ways. The findings showed academic achievement was related more to teacher training, teacher pay, and quality of curriculum; however, the report found that a student's socioeconomic status was a better indicator of the student's academic achievement (Coleman et al., 1966).

A Nation at Risk, 1983

While the Coleman Report reflected the educational issues of the 1960, the National Commission on Excellence in Education (1983) examined the state of the education system in the United States in a report titled *A Nation at Risk: The Imperative for Educational Reform*. The findings of this landmark report showed the United States education system was failing and that the future the United States was in serious jeopardy (National Commission on Excellence in Education, 1983). The findings of the report claimed that the eroding education system greatly compromised the political and global future of the United States.

The National Commission on Excellence in Education (1983) findings outlined indicators of the risk that the failing education system had caused. Indicators include:

1. International comparisons of student achievement revealed that on 19 academic tests American students were never first or second and were last seven time
2. Approximately 23 million American adults are were functionally illiterate
3. Approximately 13% of all American 17 year-olds were illiterate
4. Standardized test scores were at a 26 year low
5. Over half the nation's gifted students did not match their tested ability with comparable achievement in school
6. Employers indicated that high school graduates were academically unprepared
7. Between 1975 to 1980, remedial mathematics in public colleges increased by 72%
8. Many 17 year-olds did not demonstrate higher-order-thinking skills

The results of this landmark study offered recommendations in four categories. First, in the area of course content, the report found that curriculum was expressed that the curriculum was watered down, and many students were selecting easier courses. To strengthen the curriculum, it was recommended that students take four years of English, three years of math, three years of science, and one semester of a computer technology class. Students interested in college would also take two years of a foreign language. Second, the expectations of the schools were resulting in low student academic achievement. The recommendation to address this concern resulted in schools adopting more rigorous standards that are measureable to ensure progress. Third, American

students spent much less time in school than students in other nations. This finding also indicated that American students lacked study skills which resulted in poor time management. The recommendation was to increase the number of school days per year as well as increase the length of the school day. Fourth, the findings indicated that teacher education programs lacked the rigor needed to develop quality teachers. Because of limited interest in education programs and poor pay, education has experienced major teacher shortages in key subjects such as math, science, and technology. The recommendation was to increase contract days which would provide time for professional development. The hiring of non-educators with degrees in math and science related fields was also a recommendation (National Commission on Excellence in Education, 1983). In 2008, the U.S. Department of Education published a report titled *A Nation Accountable: Twenty-Five Years After a Nation at Risk*. In the areas of content, time, and teaching, the report indicated that no improvement has occurred and the nation is still at risk.

Goals-Educate America Act, 2000

Building upon the findings of A Nation at Risk, President Clinton signed into law by President Bill Clinton in 1994, the Goals-Educate America Act focused on improving learning opportunities through long-term, broad-based efforts that would promote coherent and coordinated improvement in the system of education throughout the nation (Goals, 2000). This act was a standards-based reform effort that would foster the development of rigorous skills that would measure academic success.

The Goals 2000 established the following:

- All children in America will start school ready to learn.

- The high school graduation rate will increase to at least 90%.
- All students will leave grades 4, 8, and 12 having demonstrated competency over challenging subject matter including English, math, science, civics and government, economics, the arts, history, and geography.
- The United States will be first in the world in math and science.
- Every adult will be literate and will possess the skills to compete in a global society.
- Every school will be free of drugs, alcohol, violence, and unauthorized firearms.
- The nation's teachers will have opportunities to continue improvement of their professional skills.
- Every school will promote partnership to increase parental involvement and participation in promoting the social, emotional, and academic growth of children.

While stressing the improvement of the educational system for all students, The Goals 2000 would create social justice for low-SES students. The focus goals of the law are things that high-SES student receive as a result of parental involvement or social capital. Low SES students rely on the school to provide guidance in these areas.

No Child Left Behind

Viewed as the culmination of education reform from the 1960s through the 1990s, the No Child Left Behind Act (NCLB) was authorized in 2001 with the goal of ensuring all public school students receive a quality education. This act, known as Public Law 107-110, was signed into law by President George W. Bush on January 8, 2002 (United States Department of Education, 2002). This law's primary goal was to significantly

improve the education of each child by setting aggressive accountability standards for all U.S. public schools (United States Department of Education, 2002). More specifically, the law focused on increasing the academic achievement of minority, economically disadvantaged, limited English proficient, and special education students (United States Department of Education, 2002). To ensure school districts took the law seriously, consequences for not making adequate yearly progress (AYP) were established (United States Department of Education, 2002). When schools do not meet the NCLB standards, they risk losing federal funding, and parents are provided the opportunity to send their student to a different school (United States Department of Education, 2002).

No Child Left Behind is a standards-based education reform that was developed with the fundamental belief that every child can learn (United States Department of Education, 2002). The Act uses the percentage of students passing standardized tests and the percentage of students participating in standardized tests as the primary measures for meeting NCLB standards (United States Department of Education, 2002*).* Although the law does not provide a national standard, each state is required to establish standards and assessments in basic skills. The law requires states to assess students in math and reading annually in grades 3 to 8 and at least once in high school (United States Department of Education, 2002). By the end of the 2007-08 school year, students were required to be assessed in science three times during grades 3 to 11 (currently 5^{th}, 8^{th}, 10^{th} grades in Texas) (United States Department of Education, 2002).

One of the requirements of NCLB is to staff schools with teachers who are highly qualified in the area they are teaching (Kim & Sunderman, 2004; United States

Department of Education, 2002). As defined by the NCLB Act (2002), a highly qualified teacher is one who has fulfilled the state's certification requirements, obtained at least a bachelor's degree, and demonstrates expertise in the subject matter. To demonstrate expertise, teachers are required to pass tests based on the level they teach. Elementary teachers are required to pass a test demonstrating knowledge and skills in reading, language arts, writing, and math. Secondary teachers are required to pass a test demonstrating knowledge and skills in the area they teach.

According to Barton and Coley (1996), student performance on standardized tests has improved significantly since the act was adopted. In the state of Texas, between 2003 and 2005, 4th grade reading proficiency increased by three percentage points, fourth grade math proficiency increased by 11 percentage points, and the achievement gap between white and minority students in the fourth grade decreased (U.S. Department of Education, 2004).

Because NCLB established high expectations for teachers and schools, local and state governments have, in many cases, been forced to raise the bar or risk losing vital federal funds. Prior to NCLB, many teachers were allowed to teach out of their certification area or even teach and not be certified in any area (Ploeg & Thum, 2004). To be in compliance with the law, teachers are only allowed to teach in the area(s) where they are highly qualified (United States Department of Education, 2002). The NCLB has also forced many states to review and modify how special education students are served (United States Department of Education, 2002). The act requires these students to be tested on grade level with modifications. Thus, the students must be provided grade level

instruction with modifications to address their handicapping conditions (United States Department of Education, 2002).

No Child Left Behind enhances the quality of education by increasing the accountability of schools. Because NCLB requires schools to improve their performance, schools have implemented professional development for teachers and programs to get parents involved in the education process. Some school districts are exploring nontraditional math curricula and early reading literacy programs (Duke, 2006; Fashola & Slavin, 1998). The Act also requires schools to communicate with parents by providing annual detailed report cards of the school's progress (United States Department of Education, 2002).

While NCLB has demonstrated many benefits, critics have described No Child Left Behind as an unfunded federal mandate (Kim & Sunderman, 2004). Although NCLB provides additional money for schools that do not meet the required annual progress, there is no additional funding to cover the costs associated with this act. Many school districts have been left to creatively fund necessities such as additional professional development.

No Child Left Behind requires the collection of academic achievement data from annual assessments on campuses, districts, and student sub-populations. The data is used to measure Adequate Yearly Progress (AYP), which evaluates the progress toward proficiency. The AYP measure was designed to hold schools accountable by focusing on disadvantaged and minority students (Borkowski & Sneed, 2006; Darling-Hammond, 2006; United States Department of Education, 2002).

Chapter Summary

The chapter presented in-depth review of the literature related to the college-readiness of low-SES students. In order to provide social justice to low-SES regarding education, they must be given opportunities to be success in high school, college and ultimately the workforce. The definition and measure of college readiness reflects there is not a connection with K-12 and college. The development and design of curriculum must not only focus on high school graduation, but also the skills necessary to be successful in college is critical to graduating college ready-low SES students.

The chapter also presented a critical look at the literature related to the academic achievement gap of low-SES students. Many efforts have been taken to close this gap. The chapter highlighted some of those academic intervention programs, while recognizing and presenting on the effects of things like parental involvement and teacher to student relationship. This chapter closed with a review of landmark legal cases that have played a role in shaping the education of low-SES students.

CHAPTER 3

Methodology

The purpose of this study was to investigate characteristics, practices, programs, and other factors of smaller Texas high schools that are successful at producing college ready low-SES graduates. The Delphi research methodology was utilized in this study by exploring principals' perceptions. The Delphi research technique is used to reach a consensus on a particular topic of a group of experts by focusing on responses to questions during a survey process comprised of a limited set of rounds (Clayton, 1997; Linstone & Turoff, 1975). The technique was an appropriate methodology for this study because it allowed the review of research from expert principals with the same or similar theoretical goals. This research study was exploratory in nature and the research questions focused on what the expert principals believed influence the college readiness of low-SES students.

Research Design

The Delphi method is the research methodology selected for this study. The study focused on identifying the characteristics, practices, programs, and other factors that the participating principal experts believe influence the college readiness of low-SES students. When considering the opinions of a group of experts, the chance of identifying factual information is better (Clayton, 1997). When determining the best ways to increase college-ready low-SES students, the opinion of multiple expert principals provided the significant input to produce a quality product.

The Delphi methodology was introduced as a research technique in the late 1950s by two Rand Corporation researchers to assess the consensus of scientist with the U.S. Department of Defense regarding the likely outcomes of nuclear warfare (Ludwig, 1997). Thus, developed originally as a systematic method, the Delphi method relies on expert information. The goal of this methodology is to provide an interactive forecasting environment that will produce a critical, well-thought-out examination, discussion, and findings (Linstone & Turoff, 1975; Ludwig, 1997). Thus, the Delphi is a method for creating a group communication process that effectively allows a group of experts to communicate about a complex topic. An important characteristic of the Delphi method is that it can be employed with large groups (30 to 100 persons) where a face-to-face conversation would be challenging and when gathering everyone in one place is an issue. The Delphi research technique has been used in many areas of study like health services, transportation, and education. The research technique is credited with being an excellent way to obtain information that is not readily known or available (Linstone & Turoff, 1975).

The selection of an appropriate methodology is imperative to the merit of this study. The qualitative portion of this study will focus on identifying what practices, characteristics, programs, or other factors the selected principals feel influence college readiness for low-SES students. Qualitative research is the process of studying things in natural settings, organizing the findings, and drawing conclusions based on the meaning that people bring (Denzin & Lincoln, 2004). To gather information for this study, the qualitative researcher used open-ended questions to develop and analyze conclusions

about the phenomenon of college readiness of low-readiness of low-SES students (Denzin & Lincoln, 2004). Thematic analysis and coding was utilized to categorize the qualitative data (Creswell, 2003). The researcher reviewed the data, then sorted common themes and thoughts into categories. This process helped the research progress from broad topic to common thinking patterns and common themes.

The quantitative portion of this study focused on building consensus regarding the identified practices, characteristics, programs, or other factors the selected principals felt influence college readiness for low-SES students. Quantitative research can be experimental in nature, using data represented as quantities or numbers and presented results through statistical findings (Patten, 2007). The result of the study will produce statistical results that are used to make inferences about the influences on college-ready low-SES students (Kachigan, 1991).

The processes involved in completing a Delphi study vary across the different disciplines, but there are some factors that are consistent. The Delphi method involves soliciting a response from experts in the form of answers and responses to questions. Thus, the first step is the selection of the experts in the particular area of study. The researcher then processes the information and provides some form of feedback, and then the experts are offered an opportunity to change their responses. In a traditional setting, the Delphi method utilizes the U.S. postal service to communicate with the experts; however, the use of electronic mail (email) can also be employed to provide a more flexible structure. Even though the Delphi process could continue until a consensus is

determined, three rounds are considered to be sufficient to collect relevant information that would indicate consensus (Cyphert & Grant, 1971; Ludwig, 1997).

The selection of the experts is the most important step in the Delphi process; thus, the experts should be highly qualified and competent in the area being studied (Hsu & Sandford, 2007; Jacob, 1996). The experts in this study were the principals of Texas high schools, whose schools had less than 1,000 students and had more than 50% of the low-SES students, who were deemed college ready, as measured by the Texas Education Agency (TEA). High school size was measured based on the TEA reported campus enrollment numbers for the 2010-2011 school year. College readiness was defined as the percentage of students who scored at or above the college-ready criteria set by the TEA (Texas Education Agency, 2010). A student was considered college-ready in math if his or her scores fell within one of the following criteria: 2200 or greater on the math exit level TAKS or 500 or greater on the SAT (1070 or greater total score) critical reading and math sections or 19 or greater on the ACT (23 or greater total score) English and math sections (Texas Education Agency, 2010). A student is considered college-ready in English if his or her scores fell within one of the following criteria: 2200 or greater on the English exit level TAKS or 500 or greater on the SAT (1070 or greater total score) critical reading and math sections or 19 or greater on the ACT (23 or greater total score) English and math sections (Texas Education Agency, 2010). Figure 1 summarizes the criteria for achieving the college readiness standard within the state of Texas.

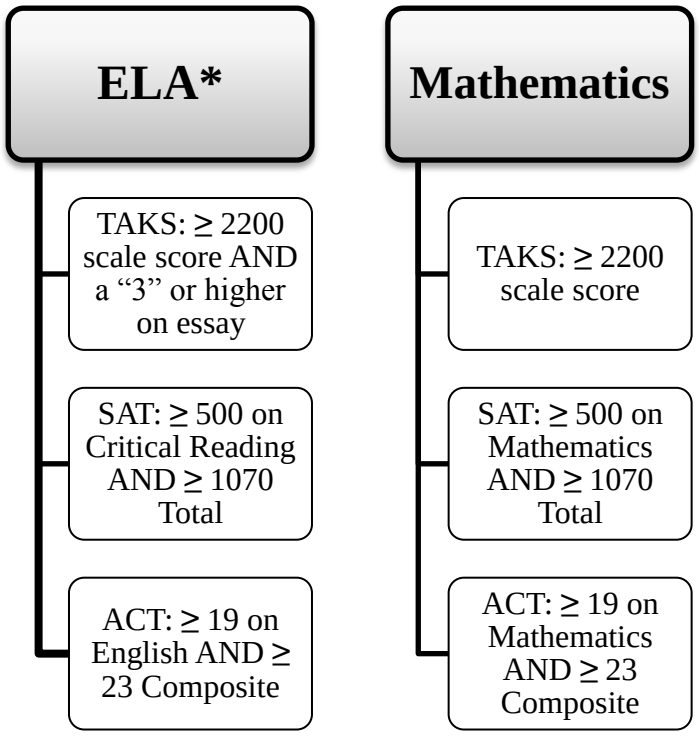

Figure 1
TEA college ready criteria scores (TEA, 2010)
*English Language Arts

The selection of the participants was based on principals from schools with more than 50% of the low-SES students being identified as college-ready as measured by the school AEIS report for 2011. The TEA website was utilized to obtain the names of the schools that qualified and the school websites were then utilized to obtain the name of the principal and other contact information. Once this information was obtained, the principals received a consent agreement via email. The goal was to obtain at least 30 principals.

Procedures

The University of Texas at Arlington institutional International Review Board for the Protection of Human Subjects approved this study, "Exploring Principals'

Perceptions of Characteristics, Practices, Programs and other factors that Influence College Readiness for Low Socioeconomic Students in Smaller Texas High Schools: A Delphi Study"', under exempt status on November 12, 2012 (Appendix A). At this point, the preparation process began with the identification of the schools in the state that qualify to participate in the study. After analysis, 189 schools were identified. The following timeline was developed to conduct the three rounds of research:

- Round 1- Thursday, December 13, 2012 to Wednesday, December 19, 2012
- Round 2 - Wednesday, January 9, 2013 to Tuesday, January 15, 2013
- Round 3 - Wednesday, January 23, 2013 to Tuesday, January 29, 2013

The expert participants used in this study were principals of high schools with less than 1,000 students who possessed the knowledge and skills to identity and implement characteristics, programs, practices and other factors that influence low-SES college-ready high school graduates. Utilizing the TEA electronic data base, the researcher created an ad hoc report to identify the Texas high schools with less than 1,000 students that had more than 50 % of the low-SES students classified as college-ready as report on the 2010-2011 AEIS School Report.

Panel Selection

After identifying the schools, the research utilized the school websites or contacted the schools to identify the principal. After identifying the principals, an email (Appendix A) regarding participant consent to participate, with a form attached, was sent to the 189 qualifying principals (Appendix B). The email asked the qualifying principals to participate in the study. Thirty-eight of the principals agreed to be a part of the study.

On December 13, 2012, the Round 1 email was sent to the 38 expert principals. Thirty-five expert principals completed all three rounds of the study. The email contained the directions and a link to the Survey Monkey to complete the survey (Appendix D). The email also outlined the dates for the three rounds of the study. In addition, an email was also sent during the subsequent rounds to remind the expert principals of the study (Appendix E). At the conclusion of the first round, a thank you email (Appendix F) was sent to the expert principals.

Data Collection and Analysis

The Delphi study consisted of three surveys: an open-ended survey to generate information in Round 1, a Likert Scale in Round 2 to begin the consensus building process, and a survey to confirm and clarify the opinion of the principals in the final round.

The first round was qualitative in design, as it included general open-ended questions that served as the foundation of specific information about characteristics, programs, practices, or other factors of smaller high schools that influence college-ready low-SES students (Custer, Scarcella, & Stewart, 1999). The first round questions followed the following statement: Based on information from TEA, you are the principal of a Texas high school with less than 1,000 students that had more than 50 % of your low-SES students classified as college-ready in 2011.

1. What programs does your school have that increase the number of college-ready low-SES students? Why?

2. What characteristics does your school have that increase the number of college-ready low-SES students? Why?
3. What practices does your school have that increase the number of college-ready low-SES students? Why?
4. What other factors do you think increase the college ready low-SES students? Why?

After receiving the data, the researcher categorized and coded the responses. Round 1 produced 184 characteristics, programs, practices, or other factors that influenced the college readiness of low-SES students (Appendix G). After reviewing the suggestions, they were categorized, based on meaning and resulted in 74 items that proceeded to Round 2 of the study (Appendix H). Thus, the researcher grouped together common themes while using the language of the experts where possible. Because many of the items were duplicates or contained more than one thought, such as a characteristics, programs, practices, or factors, the researcher categorized the suggestions. The researcher first reviewed how the expert principal identified the item. When an item was identified in multiple areas, the researcher used the following definitions to categorize the items:

Characteristic – a distinguishing trait or quality

Program – a system of service to meet a specific need

Practice – something that happen customarily

During Round 1, the experts were also given the opportunity to provide comments (Appendix G).

Consensus started to take form during round 2 of the Delphi method (Jacob, 1996). The second round was quantitative in design, in which the results were analyzed using central tendency statistics. The expert principals received an alphabetical list of the characteristics, programs, practices, or other factors generated in the first round and they were asked to rank order each item using a five-point Likert Scale. The directions were as follows:

The following is an alphabetical list of the programs, characteristics, practices, and other factors identified in Round 1 that increase the number of college-ready low-SES students. After reviewing the items, please indicate if you feel the items influence college-ready low-SES students. You will indicate your feeling by using a five-point Likert Scale where 1 = Strongly Disagree, 2 = Disagree, 3 = Neutral, 4 = Agree, and 5 = Strongly Agree. You may also add a comment.

The experts were also allowed to make additional comments during this round. After receiving the data, the researcher computed the mean and standard deviation of the data using Microsoft Excel. This process identified areas of agreement and disagreement among the experts. A mean score of 4 or greater was used to determine the items that reach consensus of influencing college readiness in low-SES students and proceeded to Round 3.

During the third and final round, the experts received the results of the second round. The third round provided the experts an opportunity to clarify their responses (Hsu & Sanford, 2007). During this qualitative round, the experts were provided the 47 items that had a mean of 4 or greater from Round 2, and they were asked whether they agree or

disagree with the factor, and they were allowed to provide comments to support their responses. Consensus was determined when all expert principals selected agree.

After the completion of Round 3, thirteen items were identified. These items were identified as characteristics, programs, practices, or other factors that increase the college readiness of low-SES students in small schools. During Round 3, the research categorized the items as a characteristic, program, practice, or other factor.

By utilizing the Delphi methodology, the principal experts had the opportunity to thoughtfully develop and refine their thinking process on the issue (Weaver, 1971). This method also limits the influence of participants to change their viewpoint, based on the influences of other experts generally present in a more traditional interview session. Thus, this issue was avoided because of the anonymity of the Delphi.

Ethical Consideration

Considerable efforts were put in place to protect the collection of material for this study, as ethical collecting and processing data is paramount to any credible study (Linstone & Turoff, 1975). The focus of this research was to explore the characteristics, programs, practices, and other factors of high schools with less than 1,000 students that had more than 50% of the low-SES students college-ready. The participants in this study were the principals of the qualifying high schools.

Even though this research does not present any obvious risk, multiple precautions were taken to protect the principals. Before agreeing to participate, the principals were provided a detailed description of how the study would progress, as well as information on how the collected information would be utilized. This critical step allowed the

principals to determine if the study presented any risk to them. To protect the identity and the information provided by the principals, the surveys were emailed with the email addresses of other participants not visible. The survey did not require the principals to list their actual name; rather, they were only asked to list their school's name, which was never directly attached to the information presented in the results. The school name was never attached to any of the information presented in the surveys, and the participating principals did not know the identity of their co-participants.

There was never a face-to-face meeting with the principals during this study. The data collection portion of this study was completed on the computer using Survey Monkey. This provided the principals the flexibility to complete the surveys at their convenience, which also could result in procrastination on their part. Thus, the timeline reminders and reminder emails were sent several times during the data collection process. Also, at the collection of each of the three rounds, an electronic thank you note was sent to the principals. Specific attention was given to ensuring that the highest levels of ethical practices were in place during this study. Because the qualitative part of the study involved categorizing data, caution was put into place to avoid personal bias affecting the study (Moustakes, 1994).

Conclusions

The Delphi Research method was utilized to collect the data for this study. Using an expert pool of principals of high schools with less than 1,000 students with more than 50% of the 2010 low-SES students being classified as college-ready, the research explored the characteristics, practices, programs, and other factors that influenced

college-ready low-SES students. Utilizing web-based surveys, the principals generated, ranked, and evaluated characteristics, practices, programs and other factors the expert principals felt influenced college-ready low-SES students. The Delphi process allowed the researcher to tap in on the wealth of knowledge and experiences of the expert principals.

CHAPTER 4

Presentation and Analysis of Data

The purpose of this study was to identify the characteristics, practices, programs, and other factors that influence the college readiness of low-SES students in high schools with less than 1,000 students. A three-round Delphi research methodology was utilized to gather the data for this study. The researcher asked the expert principals to identify and rank characteristics, practices, programs, and other factors they believed influenced the college readiness of low-SES students. The data generated from these questions is valuable to educators as decisions are made at high schools as related to increasing the college readiness of low-SES students. The chapter provides the summary of the data collected throughout the three rounds of the study. This chapter includes the following constructs: (a) overview of the Delphi, (b) expert panel selection, and (c) overview of the data.

Expert Panel

After receiving approval for the International Review Board (IRB), the process of selecting and recruiting the expert principals began. To select the principals, the Texas Education Agency Academic Excellence Indicator System (AEIS) was utilized. Principals of Texas high schools with less than 1,000 students and that had 50% or greater of the low-SES students classified as college ready qualified to be an expert principal. One hundred eighty-five principals qualified to participate. Invitation emails were sent to those principles (Appendix A). Of those, 38 agreed to participate and 35

completed all three rounds. After principals agreed to participate, electronic consent was obtained (Appendix B). Table 1 summarizes the district name, campus name, campus enrollment, and the college readiness percentage of low SES students of the 35 participants. The principals' names were not included in table to protect their anonymity. Furthermore, the expert principals' opinions are spread out over the entire group, based upon the properties of the Delphi Method.

Table 1
Data for participating schools

CAMPUS ENROLLMENT	COLLEGE READY (%)	CAMPUS ENROLLMENT	COLLEGE READY (%)
799	91	165	69
304	61	32	67
185	50	943	67
775	61	191	64
312	80	215	54
191	50	142	54
210	67	338	55
340	64	656	69
266	55	191	86
328	67	689	54
519	60	159	60
104	60	249	61
137	62	151	60
275	91	160	63
172	60	525	50
210	63	204	50
764	54		

Overview of the Data

Round 1

The Round 1 email containing the link to Survey Monkey was sent to the expert high school principals who met the qualifications to participate in this study and consented to participate. All of the questions in Round 1 were open-ended questions. The questions were emailed to the expert principals via Survey Monkey. The expert principals information in Round 1 produced 188 items (Appendix G) that were identified as a characteristic, program, practice, or other factors that they felt influenced the college readiness of low-SES students. The narrative data were then categorized into 74 items that would progress to Round 2. Of the 74 items, 15 were characteristics, 18 were programs, 38 were practices, and three were labeled *other*. After categorizing similar thoughts and protecting the words of the experts as much as possible, the following 74 characteristics, programs, practices, or other factors progressed to round 2 and represent key preliminary findings of the study:

Characteristics:

Attendance rates of 98% or better (Characteristic)

Community members encourage and support higher education (Characteristic)

Develop independent learners with good organization skills (Characteristic)

High expectations for students (Characteristic)

Involved parents, teachers, and guidance counselors (Characteristic)

Focal point on low-SES students being successful on EOC/TAKS (Characteristic)

Focus on problems that prevent low-SES students from attending (Characteristic)

Freshman orientation that encourages college readiness (Characteristic)

Motivating students to be involved in programs such as band, athletics, FFA and extracurricular activities (Characteristic)

Positive culture and climate (Characteristic)

Quality staff (teachers, coaches, counselors, etc.) focuses on building relationships with students (Characteristic)

Relationship with community college (Characteristic)

Rigorous coursework in high school (Characteristic)

Small, rural school (Characteristic)

Supportive Administration/School Board (Characteristic)

Programs:

Advanced Placement (Program)

Capturing Kids Hearts (Program)

CATE Program (Program)

CSCOPE– an articulated and challenging district curriculum developed (Program)

Dual Credit Courses (Program)

FAFSA completion tracking program (Program)

GEAR UP Grant (Program)

Online Classes (Program)

Pre-Advanced Placement Classes (Program)

Preparatory classes for PSAT, SAT, PLAN, THEA, Accuplacer Test (Program)

Naviance program which focuses on college and career planning (Program)

Professional Communication Class (Program)

Programs such as Upward Bound, Go Center, AVID, Project Lead the Way (PLTW)

Engineering Program (Program)

Reading class to support reading and writing (Program)

RTI –Response to Intervention (Program)

Summer School (Program)

Talent Search Grant (Program)

Teen Leadership Class (Program)

Tutorial based advisory class offered during and after school, during lunch, or on Saturday (Program)

Practices:

Advisory classes focused on monitoring student progress (Practice)

ASVAB test for juniors/seniors (Practice)

Audit more challenging classes (Practice)

Campus benchmark testing/common assessments in core classes (Practice)

Career Day (Practice)

College-bound readiness and awareness support group/class (Practice)

College Signing/Celebration Day where seniors sign letters of commitment to attend college (Practice)

College Vision Day where past graduates return to visit with students (Practice)

Content area teachers meeting to review student progress and data (Practice)

Double-Block Algebra 1 for Freshmen (Practice)

Early interventions at elementary level- reading recovery, balanced literacy (Practice)

Nine-Period Day (Practice)

Failing students meet with principal and counselor (Practice)

Friday modified schedule based on campus needs indicated by data (Practice)

Freshman orientation that encourages college readiness (Practice)

Grading Policy (Practice)

Help kids develop a dream/vision for their future (Practice)

Locally developed curriculum (Practice)

Meetings with seniors to discuss financial aid, scholarships, and different ways to continue education (Practice)

Middle school six-year college readiness plan (Practice)

Monthly scholarship email to students (Practice)

Ninth grade transition classes (Practice)

Failure to complete work is treated as a discipline issue (Practice)

Princeton Review/ higher education advisor offered on campus (Practice)

Project Based Learning (PBL) (Practice)

Recognize individual family economic situations and provide support to struggling students (Practice)

Re-teach Policy (Practice)

Senior meeting to discuss college readiness (Practice)

Share the results of tests such as Explore and STAAR as early as possible (Practice)

Small classes and group study sessions (Practice)

Sophomores take Geometry and Math Models (non-high math track students) (Practice)

Staff development based on assessment data disaggregation (Practice)

Students take two science classes during their junior year (Practice)

Students who are not performing are required to lose an elective for accelerated instruction (Practice)

Teacher led instruction is priority, even for computer based instruction (Practice)

Technology and curriculum that can be used at home and at school (Practice)

Visit to local colleges (Practice)

Other:

Compensating the teachers competitively (Other)

Higher education coordinator (Other)

Recommended Graduation Plan (Other)

Round 2

In Round 2, the expert principals rated the 74 items generated from Round 1. Via Survey Money, the expert principals received an alphabetical list of the programs, characteristics, practices, and other factors identified in Round 1 that increase the number of college-ready, low-SES students. Because many of the same items were identified in different categories by the expert principals, the items were presented within one category. After reviewing the items, the expert principals indicated if they felt the item influenced college-ready low-SES students by using a 5-point Likert Scale (from 1 = Strongly Disagree, 2 = Disagree, 3 = Neutral, 4 = Agree, and 5 = Strongly Agree). In

addition to rating the characteristics, programs, practices or other factors, the expert principals were allowed to make comments. Table 2 shows the Round 2 responses to the 5 point Likert scale for the characteristics, programs, practices, and other things generated in Round 1. The table presents the number of expert principals that selected each scale.

Table 2
Round 2 survey responses

SD=strongly disagree, D=disagree, N=neutral, A=agree, SA=strongly agree

ITEM	SD	D	N	A	SA
Advanced placement classes	2	3	9	11	11
Advisory class focused on monitoring student progress.	2	1	5	16	11
ASVAB test for juniors/seniors	2	1	11	16	4
Attendance rates of 98 percent or better	0	0	1	7	26
Audit more challenging classes	0	1	14	15	4
Campus benchmark testing/common assessments in core classes	0	1	3	18	12
Capturing kids hearts	0	0	7	10	17
Career day	0	1	7	18	9
CATE program	0	1	3	15	15
College bound readiness and awareness support group/class	0	1	12	12	9
College signing/celebration day where seniors sign letters of commitment to attend college	0	1	7	16	10
College vision day where past graduates return to visit with students	0	1	6	16	11
Community members encourage and support higher education	0	0	2	14	18
Compensating the teachers competitively	1	7	10	11	4
Content area teachers meeting to review student progress and data	0	0	2	14	18
C-SCOPE - an articulated and challenging district curriculum developed by outside agency	3	8	7	11	5
Develop independent learners with good organization skills	0	1	0	15	18

Table 2 - Continued

ITEM	SD	D	N	A	SA
Dual credit courses	0	0	0	9	25
Early interventions at elementary level - reading recovery, balanced literacy	0	0	1	11	22
Eight period day	2	2	10	11	9
FAFSA completion tracking program	0	0	7	17	9
Failing students meet with principal and counselor	0	0	1	15	18
Focal point on low-SES students being successful on EOC/TAKS	1	1	2	15	15
Focus on problems that prevent low-SES students from attending college	0	0	6	13	15
Freshman orientation that encourages college readiness	0	0	4	15	15
Friday modified schedule based on campus needs indicated by data	0	3	20	8	3
Gear up grant	0	1	28	4	1
Grading policy	0	2	11	13	8
Help kids develop a dream/vision for their future	0	0	2	11	21
High expectations for students	0	0	0	4	30
Higher education coordinator	0	0	14	9	11
Involved parents, teachers, and guidance counselors	0	0	1	6	27
Locally developed curriculum	0	3	15	13	3
Meetings with seniors to discuss financial aid, scholarships, and different ways to continue education	0	0	1	7	26
Middle school six year college readiness plan	0	1	12	15	6
Monthly scholarship email to students	0	0	13	9	12
Motivating students to be involved in programs such as band, athletics, FFA, and extracurricular activities	0	0	2	6	26
Naviance program which focuses on college and career planning	0	0	21	9	4
Ninth grade transition classes	0	2	16	10	6
Not completing work is treated as a discipline issue	1	7	6	10	10
Online classes	0	4	9	15	6

Table 2 - Continued

ITEM	SD	D	N	A	SA
Positive culture and climate	0	0	0	2	32
Pre-advanced placement classes	0	0	6	12	16
Preparatory classes for PSAT, SAT, PLAN, THEA, Accuplacer test	0	0	7	18	9
Princeton Review/higher education advisor offered on campus	0	2	26	3	3
Professional communication class	0	1	8	17	7
Programs such as Upward Bound, Go Center, AVID, Project Lead the way (PLTW) engineering program	0	0	13	14	6
Project based learning (PBL)	0	0	16	14	4
Quality staff (teachers, coaches, counselors, etc.) focused on building relationship with students	0	0	0	1	33
Reading class to support reading and writing	0	0	5	13	16
Recognize individual family economic situations and provide support to struggling students	0	0	2	17	16
Recommended graduation plan	0	2	4	18	11
Relationship with community college	0	0	1	13	20
Re-teach policy	0	1	5	14	14
Rigorous coursework in high school	0	0	0	10	24
RTI - Response to intervention	0	0	6	15	13
Senior meeting to discuss college readiness	0	1	3	14	16
Share the results of tests such as Explore and STAAR as early as possible	0	0	7	12	14
Small classes and group study sessions	0	0	2	13	19
Small, rural school	0	4	4	8	18
Sophomores take geometry and math models (non-high math track students)	0	4	15	7	8
Staff development based on assessment data disaggregation	0	0	3	15	16
Students take two science classes during their junior year	1	9	18	3	2
Students who are not performing are required to lose an elective for accelerated instruction.	0	3	8	15	8
Summer school	1	6	14	6	7

Table 2 - Continued

ITEM	SD	D	N	A	SA
Supportive administration/school board	0	0	0	7	27
Talent search grant	1	0	29	2	2
Teacher led instruction is priority, even for computer based instruction	0	5	6	9	15
Technology and curriculum that can be used at home and a school	0	0	3	21	11
Teen leadership class	0	0	17	11	6
Tutorial based advisory class offered during and after school, during lunch, or on Saturday	0	0	10	12	11
Use student data to determine where curriculum and instructional needs to be strengthened	0	0	3	12	17
Visits to local colleges	0	0	2	13	19

Forty-seven of the 74 the characteristics, practices, programs, or other factor had a mean of 4 or greater. Consensus was determined by calculating the mean for each of the items. The mean was calculated by totaling the Likert scale results and ranking and dividing by the total number of rankings. Mean of 4 or greater indicated a high degree of consensus and mean below 4 indicated low degree on consensus. Varied levels of consensus were indicated during round 2, with means having a range from 2.9 to 5.

The characteristic, practice, program or other factor with a mean of 4 or greater proceeded to Round 3. The mean and standard deviation indicated the degree to which the expert principals agreed that the listed items influenced college readiness in low-SES students. The mean represented the average of the rating of the expert principals, whereas the standard deviation is a measure of the variability or dispersion of the data set. A low standard deviation indicated that the data points were close to the average of the data set and a high standard deviation indicated that the data points were not close to the average

of the data set. A standard deviation of 0 indicated that the expert principals were in complete agreement. As the score increased, however, it indicated an increase in the level of disagreement. A mean score of 4 or greater was utilized to indicate a significant level of agreement and those items proceeded to Round 3. Table 3 shows the means and the standard deviation of the characteristics, programs, practices, and other factors that with mean of 4 or greater.

Table 3
Round 2 survey with mean score 4 or greater
M=mean, SD=standard deviation

ITEM	M	SD
Advisory class focused on monitoring student progress.	4.0	.01
Attendance rates of 98% or better	4.7	0.6
Campus benchmark testing/common assessments in core classes	4.2	0.7
Capturing Kids Hearts	4.3	0.8
Career Day	4.1	1.2
CATE Program	4.4	0.7
College Signing/Celebration Day where seniors sign letters of commitment to attend college	4.0	0.8
College Vision Day where past graduates return to visit with students	4.1	0.7
Community members encourage and support higher education	4.5	0.6
Content area teaches meeting to review student progress and data	4.5	0.6
Develop Independent learners with good organization skills	4.5	0.7
Dual Credit Course	4.7	0.5
Early interventions at elementary level-reading recovery, balanced literacy	4.6	0.5
FAFSA completion tracking program	4.1	0.7
Failing students meet with principal and counselor	4.5	0.6
Focal point on low-SES students being successful on EOC/TAKS	4.2	0.9
Focus on problems that prevent low-SES students from attending college	4.2	0.8

Table 3 - Continued

ITEM	M	SD
Freshman orientation that encourages college readiness	4.3	0.6
Help kids develop a dream/vision for their future	4.5	0.6
High expectations for students	4.8	0.5
Higher education coordinator	4.0	0.9
Involved parents, teachers, and guidance counselors	4.7	0.5
Meetings with seniors to discuss financial aid, scholarships and different ways to continue education	4.7	0.5
Monthly scholarship email to students	4.0	0.9
Motivating students to be involved in programs such as band, athletics, FFA and extracurricular activities	4.6	0.6
Positive culture and climate	4.9	0.4
Pre-Advanced Placement Classes	4.3	0.8
Preparatory classes for PSAT, SAT, PLAN.. THEA, Accuplacer Test	4.0	0.7
Quality staff (teachers, coaches, counselors, etc.) focuses on building relationship with students	5.0	0.2
Reading class to support reading and writing	4.3	0.7
Recognize individual family economic situations and provide support to struggling students	4.4	0.6
Recommended Graduation Plan	4.1	0.8
Relationship with community college	4.5	0.6
Re-teach Policy	4.3	0.8
Rigorous coursework in high school	4.6	0.5
RTI-Response to Intervention	4.3	0.7
Senior meeting to discuss college readiness	4.3	0.8
Share the results of tests such as Explore and STAAR as early as possible	4.2	0.7
Small classes and group study sessions	4.5	0.6
Small, rural school	4.1	1.0
Staff development based on assessment data disaggregation	4.3	0.7
Supportive Administration/School Board	4.7	0.6
Technology and curriculum that can be used at home and at school	4.2	0.6
Tutorial based advisory class offered during and after school, during lunch, or on Saturday	4.1	0.8
Use student data to determine where curriculum and instructional needs to be strengthened	4.4	0.7
Visit to local colleges	4.4	0.7

Round 3

In Round 3 of the study, the expert principals rated if they agreed or disagreed if each of the 47 characteristics, programs, practices or other factors influenced college readiness for low-SES students. The characteristics, programs, practices or other factors agreed upon by the expert principals represent the final list of items that influence college readiness for low-SES students. Consensus was determined by all expert principals selecting *agree*.

Research Question One

The programs that a school had that increase the number of college-ready low-SES students and why was the focus of the first research question. Of the 18 programs that resulted from Round 1, none of the 13 final items that reached consensus after Round 3 were programs. Based on this finding, the expert principals did not all agree any of the programs were a key factor to influencing college readiness low-SES students. There were nine programs that advance to Round 3 and had 90% of the expert principals select agree.

Research Question Two

The school characteristics that reportedly increased the number of college-ready low-SES students were the focus of the second research question. Of the 15 characteristics that resulted from Round 1, eight of the 13 items from Round 3 were characteristics. All eight of these characteristics had a mean greater than 4 in Round 2, and all had total expert principal agreement in Round 3. Table 4 shows the characteristics in order of importance (based upon mean scores from Round 2):

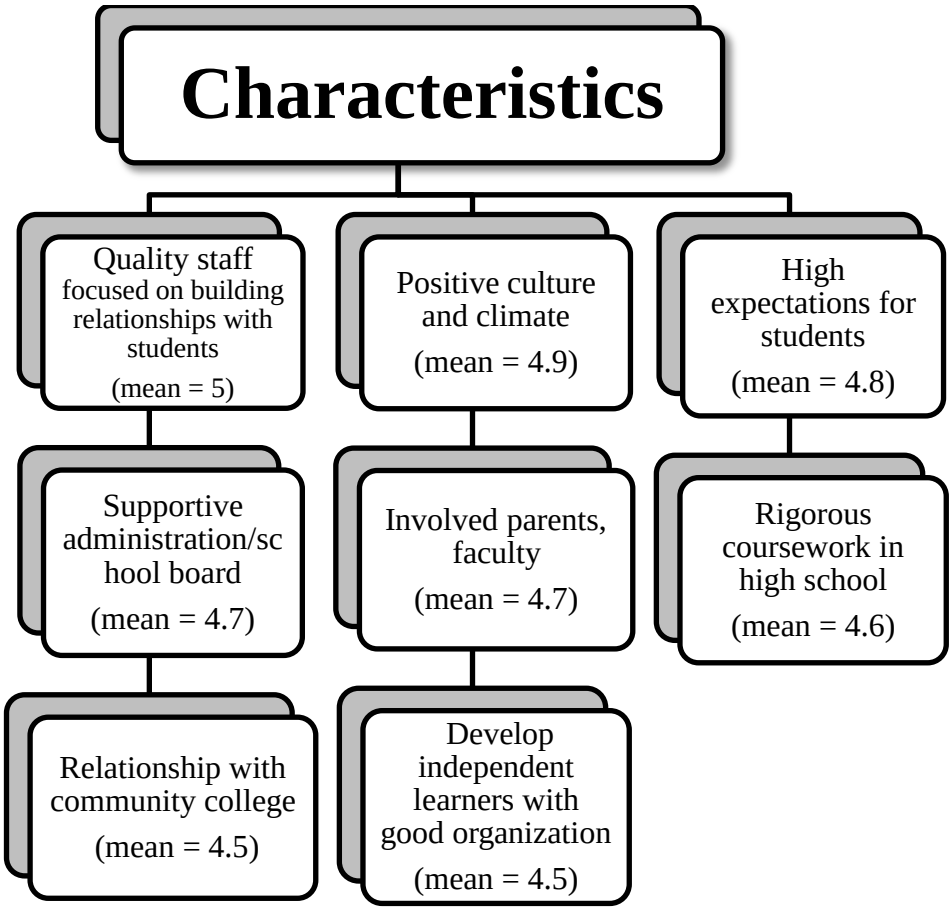

Figure 2
Characteristics that reached consensus

Quality staff (teachers, coaches, counselors, etc.) focused on building relationship with students (mean = 5)

A positive relationship with a teacher, coach, or a counselor can have a measurable effect of the academic performance of a student. Expert principals described this relationship as "crucial for kids," "the bread and butter," and "the place where the rubber meets the road." Low-SES students value the relation of staff at school (Johnson,

2004; Kannapel & Clements, 2005). An expert principal said, "it starts with teachers that are caring, and nurturing." According to another expert principal, "positive, supportive relationships help students to be more successful in the classroom." The establishment of positive relationships will produce positive results for students, and ultimately, an increase in student participation and student engagement. In the words of one expert principal, "I believe quality teachers are the key to any success and that quality teachers are only successful by building positive relationships with students." Another indicated that, "one of the most important components of students' achievement is for students to know that someone believes in them and has high expectations for them."

Positive culture and climate (mean = 4.9)

Culture and climate are critical attributes of successful schools, as they have a measurable effect on the performance of all students. An expert principal stated, "Positive culture and climate is a must have, but cannot just be a just feel good. Climate and culture must have a balance with love and motivation."

Climate and culture are the unwritten rules, the traditions, and expectations that govern the way people act (Deal & Peterson, 1999). The climate and the culture have an effect on every aspect of the school. The climate and culture of a school shape the way the teachers present instruction and ensure success of the students (Peterson & Deal, 2002). According to an expert principal, "The climate and culture of a school highlights what is valued at a school, shapes the systems on intervention when students are struggling, and what is expected of students after graduation." Another expert principal stated, "When a school has a positive, productive climate and culture, meaningful

professional development, well-developed curricula that consider the academic needs of all learners, and a systematic process to evaluate/modify developmental areas, student will learn and show academic successes."

High expectations for students (mean = 4.8)

Expectations provide a goal for students to accomplish. Several expert principals commented on the importance of having high expectations for students. One expert principals stated, "All students need high expectations set by parents, teachers, and the student themselves." He/she (or another) went on to explain that "When provided the skills and the opportunities, our students will meet our expectations."

Involved parents, teachers, and guidance counselors (mean = 4.7)

Based upon the response of one expert principal, "there are many forms of parental, teacher, and guidance counselor involvement in a school. Parents have been involved in everything from monitoring a bake sale to assisting in the classroom." Described by an expert principal as a "no brainer", the teacher takes on the role as a communicator of knowledge and the driving force to ensure student success.

The role of the counselor is crucial for providing guidance and support to students as they make decisions. The goal of the parents, teachers, and counselors is to provide support to increase student successes by creating a good learning environment that promotes student success (Fashola et al., 1998). The traditional involvement of parents in schools has changed over the years (Epstein, 1995). Thus, the involvement of the parents, teachers, and counselors needs to support the families' ability to foster student success in school. Research indicates this is important for low-SES students and families (Johnson,

2004). The involvement must communicate the information about the school and school programs. The involvement also increases the collaboration between all school stakeholders. This results in families that are better prepared to support their students, and stakeholders who are more involved. An expert principal stated, "More people having the same conversations with students will only support and encourage the students-the more involved the more successful." Research supports that high student achievement is the result of parent, teacher, and other involvements in school (Epstein, 2001; Epstein, 2005; Fashola et al., 1998).

Supportive administration/school board (mean = 4.7)

Administration and school boards play an important role in the educational decision-making process. In fact, the establishment of school boards dates back more than 200 years when the members were generally professionals or educational reformists (Land, 2002). Regardless of past or present, school boards and administration are charged with critical functions, like financial management and hiring quality staff. These are functions that are necessary for not only student achievement, but also for schools to operate. One expert principal stated, "To be supportive and increase student achievement, school boards and administration must highlight the educational needs of all students—especially the students who are academically struggling." Participants agreed that effective school boards are focused on developing policies that emphasize supporting student achievement. The administration is charged with shaping and enforcing the policies developed by the school boards. It is the administration that is responsible for the day-to-day operations. Reiterated by participants and research, for students to learn and

be successful, the school board and administration must be focused on finances, policies, and effective leadership (Land, 2002).

Rigorous coursework in high school (mean = 4.6)

The jobs for whichwe are preparing students will require a workforce that is well-educated. An expert principal commented, "Educators will need to establish a system that prepares students for college level work that will produce well-educated individuals." To prepare students to become a part of tomorrow's workforce, they need rigor in the classroom, schools need to offer more rigorous courses, and teachers must provide challenging and meaningful instruction teachers (Achieve, 2009; Adelman, 2006). Described by an expert principal as "a constant effort to raise the bar, students need to be in classrooms with a high cognitive level that allows students to master skills like analyzing, evaluating, and synthesizing."

Relationship with community college (mean = 4.5)

Based upon comments by participants in the study, the community college is used as a bridge between a student attending a four-year college and an avenue for a student to obtain an associate's degree. The issue is that students currently enter community college missing the academic skills to be successful at that level (ACT, 2005). During the 2006-2007 academic year, 35% of all students enrolled at the college level were enrolled in a community college (ACT, 2011). Furthermore, as many as 61% of college students are required to take at least one developmental/remedial class in English, reading, and/or math (Alliance for Excellent Education, 2006; Conley, 2003). The expert principals believe community colleges and high schools must communicate to better understand

why students are being required to take developmental/remedial courses at such as high rate.

Develop independent learners with good organization skills (mean =4.5)

According to an expert principal, "Students should develop independent learning skills and good organization skills in all classes; these skills should translate to the college classroom." Student behaviors, such as time management and organizational skills, which greatly affect student success, are referred to as the non-cognitive skills and norms of performance, as these are the skills that allow students to successfully navigate a new environment (Conley, 2007). An expert principals said, "The more organized, the better a child." Described in another comment as, "true survival, coping skills every young person must have to be successful after high school."

Research Question Three

The practices that a school had that influenced the number of college-ready low-SES students and why was the focus of the third research question. Of the 38 practices that resulted from round 1, 5 of the 13 items from Round 3 were practices. All five of these practices had a mean greater than 4 in Round 2, and all had total expert principal agreement in Round 3. Table 5 shows the practice that reached consensus after Round 3 listed in order of importance (based upon mean scores from Round 2):

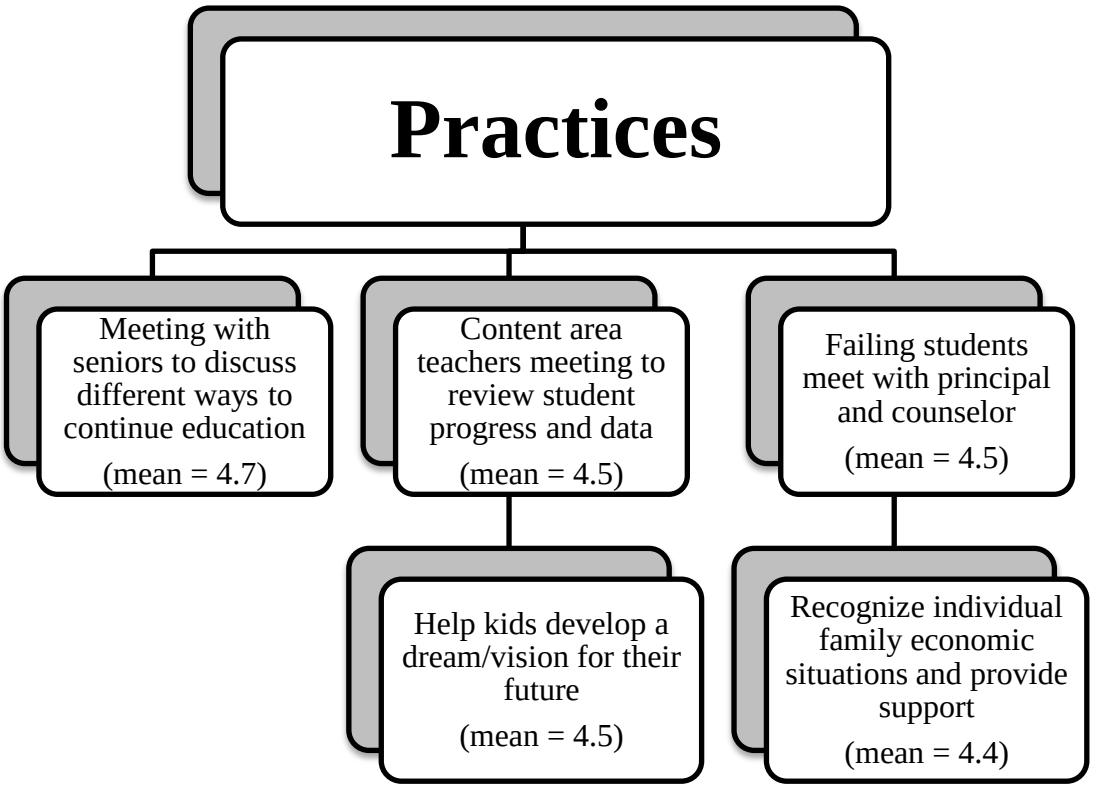

Figure 3
Practices that reached consensus

Meetings with seniors to discuss financial aid, scholarships, and different ways to continue education (mean = 4.7)

Students should become aware of financial aid, scholarships, and different ways to continue education early in their high school career. According to an exert principal, "Students who describe school as a place where they have gained knowledge about the collegiate culture generally have met with and developed a relationship with someone within their particular campus." In general, they have met with and developed a relationship with someone at the school. Furthermore, even when students are attending college, the rate of graduation is between 30% and 50% at the nation's open admission

(least selective) universities (U.S. Department of Education, National Center for Education Statistics, 2011). As stated by an expert principal, "To see measurable improvement, schools must identify the barriers and provide access to information and support for students to attend and complete college." The ability to attend college is affected by the post-secondary information a student possesses (Adelman, 1999). As reflected in the comments of expert principals, "Schools need to put policies, perceptions, and practices in place that provide students with information to increase access to college."

Content area teachers meeting to review student progress and data (mean = 4.5)

According to one participant, "It is important that teachers meet frequently to review the progress of the students based on data related to student performance." The work of a teacher is more than providing the instruction in the classroom, but it starts with the planning process. An expert principal stated, "The planning process helps teachers to feel that they are not alone and students benefit from the information discussed where teachers can pre-teach due to knowing/insights into weakness."

According to an expert principal, "the planning process of effective teachers should be a step-by-step process where student performance is a focus. For the teacher to appropriately use data to increase student success, they must know how to interpret and use the student data." In fact, there is research that supports the imperative need for data in increasing student success (Adelman, 2006; Duke, 2006). The consensus of the comments from the expert principals was that teachers need as much planning time as possible, and common planning allows teachers to share strategies.

Failing students meet with principal and counselor (mean = 4.5)

According to one expert principal, "The relationship component of a student's matriculation through high school is very important." Many students will pass classes and go to college as a result of a relationship with an adult from their high school campus. A participant stated, "When students are not successful, it is important that principal and counselors visit with the students." Another comment stressed, "Before the meeting, principals and counselors must develop a system of support where option will be made available to assist the failing student with improving their grade." Expert principals also felt the parent(s) must be involved in the conversation concerning student success also.

Help kids develop a dream/vision for their future (mean = 4.5)

Vision has been described as looking at one's current situation in relation to a better, ideal future (Beach, 2006). In most cases, successful students have a dream or a vision of their destiny before achieving success. One expert principal committed, "Many students have not even thought about or talked about attending college or thought about what their interest." Many students do not focus on systematic, realistic planning when developing dreams and visions for the future. According to the participants, it is imperative that schools have processes in place to assist students with the development of dreams and goals for their future. An expert principal stated, "Having a dream/vision is key to the success of low-SES students and many will not get this concept." The processes must help students identify the need for change, and then make the necessary decisions for the change to occur, and provide the support system to support in the achievement of the goal (Kotter, 1996).

Recognize individual family economic situations and provide support to struggling students (mean = 4.4)

The expert principal agreed that, regardless of the financial situation of a family, most people have aspirations that their children will achieve the American Dream. Most families view education as the opportunity for their children to acquire the necessary skills to improve their quality of life (Epistein, 2001, 2005). The unfortunate fact is that low-SES students often receive educations that are not equitable (Kannapel & Clements, 2005). A considerable part of this problem is the low-SES families do not have the funds needed to provide the advantages that capital provides. This lack of exposure can often lead to the academic challenges for students. An expert principal stated, "Schools must provide struggling students with the support that is needed to achieve academic success." Another expert principal stressed "the importance of opportunities like free/reduced lunch and fee waivers for low-SES students."

Research Question Four

The other factors that a school has that increase the number of college ready low-SES students and why was the focus of the fourth research question. Of the 3 other factors that resulted from Round 1, none of the 13 final items after Round 3 were other factors. There were two other factors that advance to Round 3 and had 90% of the expert principals select agree. The 13 items that resulted from round 3 were all classified as a practice or a characteristic.

Chapter Summary

This chapter presented the characteristics, practices, programs, and other factors that influence the college readiness of low-SES students in high schools with less than 1,000 students. The researcher utilized a three-round Delphi research methodology to gather the data for this study. Based upon consensus of the expert principals, no specific program were described that contributed significantly to the college readiness of low-SES students. Nor did the participants reach consensus on other factors that increased the college readiness of this students group. The areas of consensus were limited to practices and characteristics, which are summarized below.

The expert principal participants identified five practices that influenced college readiness for low-SES students. They recognized the importance of individual family economic situations and the importance of provide support to struggling students. They indicated that failing students should conference with a principal or counselor. They believed that content area teachers should meet regularly to review student progress, focusing on data, and the potential for meaningful adjustments. Because low-SES students have limited exposure to the college experience, the expert principals felt the school was responsible for meeting with seniors to discuss financial aid, scholarships, and different ways to continue education. Furthermore, they felt the school should foster an environment that helps kids develop a dream/vision for their future.

The expert principal participants identified eight characteristics that influenced college readiness in low-SES students. The characteristics center on a positive culture and climate that established high student expectations through supportive relationships.

The expert principals indicated that that parents, teachers, and the counselors need to be actively involved. They felt the teachers must be quality and build supportive relationships with the students, while providing rigorous learning opportunities. To expose low-SES student to college, the expert principals indicated the importance of a relationship with the community college. And schools that increase low-SES college readiness need to have a supportive administration and school board.

Chapter 5

SUMMARY OF STUDY FINDINGS, CONCLUSION, LIMITATIONS, IMPLICATIONS, AND RECOMMENDATIONS

Educators have faced the challenge of providing all students with an adequate education for a long period of time. Identifying ways to compensate for low-SES students has always been a difficult issue for educators. In fact, high schools have been highly criticized for the number of low-SES students that graduate from high school but are not prepared to be successful in college for years (ACT, 2004, 2005). The objective of this research was to explore principals' perceptions of characteristics, practices, programs and other factors that influence the college readiness of low-SES students in small Texas high schools. In this study, a small high school qualified to participate was defined as having less than 1,000 students, in which 50% or greater of the low-SES students classified as college-ready as measured by the school AEIS report card. The study only looked at Texas high schools. The objective was achieved by using the panel of expert principals who elected to participate. The Delphi methodology, which is both quantitative and qualitative in design, was the research methodology selected for this study.

This research was based on the issues created by low numbers of college-ready, low-SES students. The research questions were designed to explore the principals' perceptions of characteristics, practices, programs, and other factors that influence college readiness for low-SES students in small Texas high schools. This chapter involves the presentation of the following: (a) finding, (b) conclusion, (c) limitation of

the study, (d) implications for research and practice, (e) recommendation, and (i) future research.

Findings

The Delphi study identified 13 items that expert principals felt would influence college readiness for low-SES students in small Texas high schools. The first round resulted in 174 items that were categorized to 74 items that progressed to Round 2. In Round 2 of the Delphi study, the expert principals were asked to rate the 74 items that emerged from Round 1. The items were rated by using a 5-point Likert Scale where 1 = Strongly Disagree, 2 = Disagree, 3 = Neutral, 4 = Agree, and 5 = Strongly Agree. The expert principals were also allowed to make additional comments. Of the 74 items from Round 2, 46 items had a mean 4 or greater, thus progressing to Round 3. In Round 3, the expert principals were asked if they agreed or disagreed that the item increased the college readiness of low-SES students. Again, the expert principals were allowed to make comments. The researcher determined consensus in this round when all expert principals selected agree. In round 3, the expert principals reached consensus that 13 of the characteristics, practices, programs, or other factors increased college readiness of low-SES students. A list of these factors that expert principals perceive to increase the college readiness of low-SES students was generated by this Delphi study. The list is as follows:

1. Content area teachers meeting to review student progress and data (Practice)
2. Failing students meet with principal and counselor (Practice)
3. Help kids develop a dream/vision for their future (Practice)

4. Meeting with seniors to discuss financial aid, scholarships, and different ways to continue education (Practice)
5. Recognize individual family economic situations and provide support to struggling students (Practice)
6. Involved parents, teachers, and guidance counselors (Characteristic)
7. Positive culture and climate (Characteristic)
8. Quality staff (teacher, coaches, counselors, etc.) focused on building relationships with students (Characteristic)
9. Relationship with community college (Characteristic)
10. Rigorous coursework in high school (Characteristic)
11. Supportive administration/school board(Characteristic)
12. Develop independent learners with good organization skills (Characteristic)
13. High expectations for students (Characteristics)

The expert principals generated 18 programs that influenced college readiness. Of the 18 programs that resulted from Round 1, none reached of the 13 final items after Round 3 were programs. Based on this finding, the expert principals did not reach consensus on any of the programs as influencing college readiness low-SES students.

The research questions in this study explored items that expert principals' reached consensus on as influencing college readiness on low-SES students in small Texas high schools. Using open-ended instruments, expert principals were allowed to provide

comments. A qualitative analysis was conducted and the participants provided rich information to support the findings of the study.

Conclusion

High school graduates face many complicated issues in their efforts to be successful in college. The majority of the jobs for which current high school graduates are preparing will require a higher level of education. As students are preparing to be competitive in a global society, it is critical that schools increase student success. This high school design must consider the diverse needs of all students. Thus, the needs of the lowest and the highest performing student groups are important.

The analysis of the data provides insight into the characteristics, practices, programs and other factors that have an influence on producing low-SES students who are college-ready. Providing low-SES students with the opportunity to be college-ready upon graduation from high school is an important challenge facing our nation. Schools in Texas and across the nation are determining how to increase the representation of low-SES students in college. Therefore, it is important to identify characteristics, programs, practices, and other factors that expert principals perceive to increase the college readiness of low-SES students. The use of programs did not reach consensus in this study; however the importance of characteristics and practices of excellent (or best practices) shined through.

Limitations of the Study

As with any methodology, the Delphi research method does have limitations. Research indicates that there are five common reasons why a Delphi could fail (Linstone & Turoff, 1975):

- Imposing monitor views and preconception of a problem upon the respondent group by over-specifying the structure of the Delphi and not allowing for contribution of other perspectives related to the problem.
- Assuming that Delphi can be a surrogate for all other human communication in a given situation.
- Poor techniques of summarizing and presenting the group response and ensuring common interpretation of the evaluation scales utilized in the exercise.
- Ignoring and not exploring disagreement, so that discouraged dissenters drop out and an artificial consensus is generated.
- Understanding the demanding nature of a Delphi and the fact that the respondents should be recognized as consultants and properly compensated for their time if the Delphi is not an integral part of their job function.

Barnes (1987) indicated additional disadvantages of the Delphi Technique:

- Judgments are those of a select group of people and may not be representative;
- Tendency to eliminate extreme positions and force a middle-of-the-road consensus;
- More time-consuming than the normal group process;
- Should not be viewed as a total solution;

- Requires skill in written communication;
- Requires adequate time and participant commitment

The following are the limitations of the study:

- The sample of principals who agreed to participate may not reflect the attitudes of all the principals who qualified to participate. Thus, the results are limited to the opinion of the principals who chose to participate.
- The college readiness data included only 11th graders. The study is limited to campus enrollment numbers reported by TEA in 2010-2011.
- The consensus for Round 3 was set at all expert principals selecting agree.
- The measure for being college-ready was set at 50 % of the low-SES students classified as college-ready as report on the 2010-2011 AEIS School Report.

Implications for Theory, Research, and Practice

This study identified the characteristics, practices, programs and other factors that influence college readiness for low-SES students in small Texas high schools. The essential findings of the study identified 13 programs and practices that all the expert principals agreed increase the college readiness for low-SES students. Educators are constantly in search of interventions that increase the successes rate of low-SES students in school. Students from poor families generally require additional support to achieve at the rate of their high SES peers (Education Trust, 1999; Epstein, 2001; Roderick et al., 2009). The following are implication for research and practice:

1. Educational leaders, whether or not they are serving in an administrative role such as the principal, need to make a commitment to evaluate the effectiveness of

characteristics, programs, and practices utilized to influence college readiness of all students.

2. The study uncovers several school characteristics and best practices that positively affect college readiness for low-SES students. While the administrators in the study could successfully articulate these positions, it is likely that aspiring principals may not possess such discernment. For this reason, the study revealed the need for administrator certification programs to help future educational leaders better evaluate the effectiveness of characteristics, program, or practice of a school.
3. The result of the study indicated that programs did not reach consensus in the Round 3. However, there were programs generated in Round 1, Round 2 and even advanced to Round 3. Even though these programs did not reach consensus, principals endorsed the different programs. Schools spend a substantial amount of financial resources on programs. Furthermore, there is a measure of human resource investment with the implementation of programs when considering the personal needed for implementation and the time devoted to professional development. For this reason, school-decision makers must consider the desired end before investing in a program.
4. The 13 items that received consensus of all the expert principals were characteristics and practices. In most cases, the characteristics and practices are free or require a minimal financial investment. Because of the issues facing low-SES students regarding college-readiness, school decision-makers need to

increase behaviors that will be a positive characteristic and increase best practice to influence the academic success of low-SES students.

Recommendations for Future Studies

This study is significant in that it provides principals with findings regarding characteristics, programs, practices, and other factors that influence the college readiness on low-SES students in small high schools. This study also provides information that is important for all decision-making stakeholders to consider. The researcher would like to make the following recommendations for future studies:

1. The study focused only on high school principals in Texas. Further study should be conducted to determine if the results would be different if the expert principals were from different states or all from states other than Texas.
2. This study focused on school with less than 1,000 students. Further research should be conducted to determine if the results would be different if the target schools had more than 1,000 students.
3. This study focused on school with less than 1,000 students. Further research should be conducted to determine if the results would be different if the 50% college-ready low SES students criteria was increased to a higher percent like 70%.
4. This study focused on schools with less than 1,000 students. Further research should be conducted to determine if the results would be different if the consensus in Round 3 was determined differently.

5. The study focused on the perceptions of the principal. Further research should be done to determine the factors that other stakeholders, like parents, teachers, and counselors, feel influence the college-readiness of low-SES students.
6. An in-depth, multi-site qualitative case study of the characteristics, practices, programs, and practices that influence college readiness should be conducted to produce more rich observations.

The current study explored and identified characteristics and practices of smaller Texas high schools that successfully produce college-ready low-SES graduates. It revealed the characteristics and practices that influence college readiness in low SES students, which can play a significant role in closing the academic achievement gap facing low SES students. For the American educational system to be a socially just institution, it must continuously make efforts to provide all students, particularly the most underrepresented groups, with academic opportunities that result in students completing high school and becoming successful in college. Inspired by several influential court cases and legislative interventions, including Brown v. Board of Education of Topeka and NCLB, the current research supplied examples of successful school practices and characteristics that benefit low SES-students. While programs like GEAR UP and AVID have been shown to be effective with low-SES students, none of the generated programs reached consensus in Round 3. The conclusions of the study, expressed from the perspective of principals of small schools, may inform leaders of larger schools with respect to practices and characteristics that support college readiness for low-SES students.

APPENDIX A
SELECTION PROCESS EMAIL

Good Day:

My name is T. Lamar Goree and because of your school's academic success with educating economically disadvantaged students, I need your help. I am conducting a Delphi study entitled, "Exploring Principals' Perceptions of Characteristics, Practices, and Programs that Influence College Readiness for Low Socioeconomic Students in Small Texas High Schools." This study is for my dissertation at the University of Texas at Arlington. The purpose of this study is to investigate characteristics, practices, and programs of smaller Texas high schools (less than 1000 students) that are successful at producing 50% or greater college ready low SES graduates. Your school is one of 189 that qualify to participate. Because so few schools are performing at your level, your participation is very important.

The Delphi method will be utilized, which involves soliciting a response from experts in the form of answers and responses to questions. The study will utilize Survey Monkey to manage three rounds of questions. Each round will be 7 days with 7 days between rounds. You will be contacted via email to participate in the additional procedures.

If you will participate, please do the following:
Review the attached consent participation form and reply to this email by Monday, December 3, 2012 stating the following:
I HAVE HAD THE OPPORTUNITY TO READ THIS CONSENT FORM AND I AM PREPARED TO PARTICIPATE IN THIS PROJECT.

Thank you for your time and consideration. You participation will be greatly appreciated! If you have any questions about this research project, I can be contacted at (817)528-3534 or feel free to email.

Sincerely,
Lamar Goree
Area Superintendent, Mansfield ISD
2739 Waterfront Drive
Grand Prairie, Texas 75054
Phone: 817.528.3534
Email: lamar.goree@yahoo.com

Dissertation Chair:
James Hardy, Ph.D.
Box 19227
701 Planetarium Place
Arlington, Texas 76019
Phone: 817.272.0470 Fax: 817.299.2127
Email: jimhardy@uta.edu

APPENDIX B
CONSENT

RESEARCH PARTICIPANT CONSENT FORM

Exploring Principals' Perceptions of Characteristics, Practices, and Programs that Influence College Readiness for Low Socioeconomic Students in Small Texas High Schools

Investigator: Theodis Lamar Goree

Advisor/Professor: Dr. James Hardy

Graduate Studies in Educational Leadership and Policy Studies

Purpose of Research - Although there are studies on college readiness and small school success, there is limited research that focuses on small Texas high schools that produce high percentages of college ready low SES students. The purpose of this study is to investigate characteristics, practices, and programs of smaller Texas high schools that are successful at producing 50% or greater college ready low SES graduates.

Specific Procedures to be Used - The Delphi method will be utilized. It involves soliciting a response from experts in the form of answers and responses to questions. The study will utilize Survey Monkey to manage three rounds of questions. Each round will be 7 days with 7 days between rounds. The first round will be general open-ended questions that will serve as the foundation of specific information about characteristics, practices, and programs of smaller high schools that produce college ready low SES students. The first round is qualitative in design. After receiving the data, it will be categorized. The second round is quantitative in design in which the results will be analyzed using central tendency statistics. You will receive an alphabetical list of the data generated in the first round. You will be asked to rank order the findings using a five-point Likert scale. You will also be allowed to make additional comments during this round. After receiving the data, statistical computations will be conducted. This process will identify areas of disagreement among the experts. A mean score of 4 or 5 will be used to determine the items that reach consensus. During the third and final round, you will receive the results of the second round and will be asked to revise or specify my responses. The third round will provide an opportunity to clarify your responses. You will be asked if you agree or disagree with items. You will also have an opportunity to provide comments to support your responses.

Duration of Participation - The estimated research project completion date is January 2013.

Risks to the Individual - There is minimal risk due to the nature of the study and the confidentiality of the data gathered.

Benefits to the Individual or Others - When completed, this study will identify characteristics, practices, and programs of smaller Texas high schools that are successful at producing college ready low SES graduates. If you are willing to participate in this study, please reply to this email that you have reviewed the consent participation form and would like participate.

Cost to Participate - There is no cost to participate.

Confidentiality - Personal information obtained during the research project, and participant's association with the research project will be kept confidential throughout the research project and subsequent publication of results. Overall research project information will be maintained by the investigator on electronic media with limited access.

Voluntary Nature of Participation - You do not have to participate in this research project. If you agree to participate, you can withdraw your participation at any time without penalty by notifying the investigator by email or telephone.

Contact Information - If there are any questions about this research project, please contact T. Lamar Goree, (817)528-3534 or Dr. James Hardy, (817)272-0470. Concerns about the treatment of research participants can be directed to the Institutional Review Board (IRB) at the University of Texas at Arlington, Office of Research Administration, Box 19188, 200 East Border Street, Arlington, Texas 76019, (817)272-9329.

I HAVE HAD THE OPPORTUNITY TO READ THIS CONSENT FORM, ASK QUESTIONS ABOUT THE RESEARCH PROJECT AND I AM PREPARED TO PARTICIPATE IN THIS PROJECT.

APPENDIX C

CONSENT TO PARTICIPATE EMAIL

Good Day:

My name is T. Lamar Goree and because of your school's academic success with educating economically disadvantaged students, I need your help. I am conducting a Delphi study entitled, "Exploring Principals' Perceptions of Characteristics, Practices, and Programs that Influence College Readiness for Low Socioeconomic Students in Small Texas High Schools." This study is for my dissertation at the University of Texas at Arlington. The purpose of this study is to investigate characteristics, practices, and programs of smaller Texas high schools (less than 1000 students) that are successful at producing 50% or greater college ready low SES graduates. Your school is one of 189 that qualify to participate. Because so few schools are performing at your level, your participation is very important.

The Delphi method will be utilized, which involves soliciting a response from experts in the form of answers and responses to questions. The study will utilize Survey Monkey to manage three rounds of questions. Each round will be 7 days with 7 days between rounds. You will be contacted via email to participate in the additional procedures.

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Dissertation Chair:
James Hardy, Ph.D.
Box 19227
701 Planetarium Place
Arlington, Texas 76019
Phone: 817.272.0470 Fax: 817.299.2127
Email: jimhardy@uta.edu

APPENDIX D
PARTICIPATION EMAIL

Good Day:

Thank you for agreeing to participate in my Delphi study entitled, "Exploring Principals' Perceptions of Characteristics, Practices, and Programs that Influence College Readiness for Low Socioeconomic Students in Small Texas High Schools." Your school is one of 189 that qualify to participate. Because so few schools are performing at your level, your participation is very important and a point of pride for your school.

The Delphi method will be utilized, which involves soliciting a response from experts in the form of answers and responses to questions.

The following is the link to the survey monkey for round one:

https://www.surveymonkey.com/s/C8CZK2Z

The following is the timeline for Delphi data collection:

- Round one - Thursday, December 13, 2012 to Wednesday, December 19, 2012
- Round two - Wednesday, January 9, 2013 to Tuesday, January 15, 2013
- Round three - Wednesday, January 23, 2013 to Tuesday, January 29, 2013

You participation is greatly appreciated! If you have any questions about this research project, I can be contacted at (817)528-3534 or feel free to email.

Sincerely,

Lamar Goree
Area Superintendent, Mansfield ISD
2739 Waterfront Drive
Grand Prairie, Texas 75054
Phone: 817.528.3534

Dissertation Chair:
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701 Planetarium Place
Arlington, Texas 76019
Phone: 817.272.0470
Fax: 817.299.2127
Email: jimhardy@uta.edu

APPENDIX E
EMAIL REMINDER

Good Day:

Thank you for agreeing to participate in my Delphi study entitled, "Exploring Principals' Perceptions of Characteristics, Practices, and Programs that Influence College Readiness for Low Socioeconomic Students in Small Texas High Schools."

This is a gentle reminder that round one will close on Wednesday, December 19th, 2012. Please take a few minutes and complete the survey monkey today!

The following is the link to the survey monkey for round one:

https://www.surveymonkey.com/s/C8CZK2Z

You participation is greatly appreciated! If you have any questions about this research project, I can be contacted at (817)528-3534 or feel free to email.

Sincerely,

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701 Planetarium Place
Arlington, Texas 76019
Phone: 817.272.0470
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APPENDIX F
THANK YOU EMAIL

Good Day:

Thank you for agreeing to participate in my Delphi study entitled, "Exploring Principals' Perceptions of Characteristics, Practices, and Programs that Influence College Readiness for Low Socioeconomic Students in Small Texas High Schools." Your school is one of 189 that qualify to participate. Because so few schools are performing at your level, your participation is very important and a point of pride for your school.

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APPENDIX G
ROUND 1, 2, AND 3 DATA

Round 1 Data - ABC Order

100 percent college acceptance expectation for senior class
6 week meetings with seniors to discuss financial aid, scholarships, and different ways to continue education
60 percent of grade from dual credit class and 40 percent for high school class
9th grade transition classes
Academically successful in rigorous coursework in high school
Additional reading class to support reading and writing
Advanced Placement classes
All students must take a dual credit course
All students on Recommended graduation plan
All students take a professional communication class
All students take teen leadership class
Allow students to audit more challenging classes
Apply Texas Workshop
Believe every student can learn
Campus benchmark testing
Capturing Kids Hearts
Caring teachers who believe in hard work and dedication to their students as they create non-threatening Communication
with the families
CATE program
College bound readiness and awareness support group or class
College Signing/Celebration Day where seniors sign letters of commitment to attend college
College vision day where past graduates return to visit with students
College/career advising and visits to local colleges
Common assessment in core classes
Community members encourage and support higher education
Compensating the teachers competitively
Content area teacher meeting to review student progress and data
Counselors begin supporting college readiness in eighth grade and encourage recommended graduation plan in high school
Create relationships with the students
Cscope - an articulated and challenging district curriculum
Daily advisory class focused on monitoring student progress
Designated area at graduation with 21 or more hours of college credit
Develop a 6 year college readiness plan in middle school

Development of academic habits that promote success at the collegiate level
District benchmark testing
District pays for dual credit class and book
Double block Algebra 1 for freshman
Dual Credit Program classes and tutoring online in a computer lab during a period of the day
Early interventions at elementary level - Reading recovery, balanced literacy
Education 2020
Eight period day
Encourage students to attend small college
FAFSA completion tracking program
Failing students meet with principal and counselor
Focal point on low SES students being successful on EOC/TAKS
Focus on problems that prevent low SES students from attending college
Freshman Orientation encouraging college readiness
Friday modified schedule based on campus needs indicated by data
Gain the trust of the students
Gear Up Grant
Give students the responsibility to make choices about their learning and give them the responsibility to make choices regarding their time on campus
Grading policy
Grand Central station to assist students with independent learners and organization skills
Help kids develop a dream/vision for their future
High expectations for students
High expectations for teachers including continuous workshops and training
Higher education coordinator
Hold career day
Identified low SES students are provided small group instruction when possible
Incorporate soft skills in the curriculum that will promote success in the workplace
Individual student focus instead of group or class
Instructional practices that require problem solving and have to put complex pieces together to formulate an answer
Integrated curriculum
Intercession instruction to support identified bubble students
Involved parents, teachers and guidance counselors
Juniors take the ASVAB test
Locally developed curriculum
Low SES students encouraged to take Advanced Placement classes in all strong areas
Low SES students must have an encouraging relationship with someone at work
Maximizing instructional time and monitoring student progress
Monthly scholarship email

Motivating students to be involved in programs such as band, athletics and FFA and extracurricular activities
Motto that success is built on success
Naviance program which focuses on college and career planning
Not completing work is treated as a discipline issue
Ongoing strong relationship with community college
Online classes and mentoring programs
Parents must have opportunity to be a part of students' education including encouraging higher education, parent portal to access grades and continued communication on college readiness
Performance based projects
Place students with a content teacher to support dual credit work
Positive culture and climate
Pre-Advanced Placement classes
Princeton Review/higher education advisor offered on campus
Programs such as Upward Bound, Go Center, AVID, Project Lead the Way (PLTW) Engineering Program
Project based learning (PBL)
Provide opportunity for students to visit with specialist and skilled advisors to discuss college readiness, the application and financial aid process
Provide students skills needed to accomplish dream/vision
Prep classes for PSAT, SAT, PLAN, THEA, Accuplacer Test
Quality staff (teachers, coaches, counselors, etc.) focused on building relationships between school and students that send a message of college ready, career ready, and life ready
Recognize individual family economic situations and provide support to struggling Students
Recruit low SES students
Refuse to give up on any student
Renaissance course
Reteach policy
Rigorous curriculum
RTI - Response to intervention
Senior meeting to discuss college readiness
Seniors take the ASVAB test
Share the results of tests such as Explore and STAAR early as possible
Small classes and group study sessions
Small, rural school
Sophomores take Geometry and Math Models (non-high math track students)
Staff development based on assessment data disaggregation
Staff examination of student work

Striving to achieve a 98 percent attendance rate
Strong department heads, counseling staff, and discipline management and parental Support
Student centered classrooms
Students take 2 - 3 hour college courses during a single semester
Students take 2 science classes during their junior year
Students that are not performing are required to lose an elective for accelerated instruction
Summer school
Support dual credit class with TEKs based instruction
Supportive administration/school board
Take extra measures to know student progress
Talent Search Grant
Teacher led instruction is priority, even for computer based instruction
Technology and curriculum that can be used at home and at school
Think Through Math - a web based math program
Three week academic review by grade/content
Tutorial based advisory class offered during and after school, during lunch, or on Saturday
Use student data to determine where curriculum and instructional needs to be strengthened
Utilize the continuous feedback loop
Zero hour classes offered to support student needs

Round 2 Survey List

What is the name of your school (for Identification Purposes Only)
Advance Placement
Advisory class focused on monitoring student progress.
ASVAB test for juniors/seniors
Attendance rates of 98 percent or better
Audit more challenging classes
Campus benchmark testing/common assessments in core classes
Capturing Kids Hearts
Career Day
CATE Program
College bound readiness and awareness support group/class
College Signing/Celebration Day where seniors sign letters of commitment to attend college
College Vision Day where past graduates return to visit with students
Community members encourage and support higher education
Compensating the teachers competitively
Content area teachers meeting to review student progress and data
Cscope – an articulated and challenging district curriculum developed
Develop independent learners with good organization skills
Double Block Algebra 1 for Freshmen
Dual Credit Courses
Early interventions at elementary level- Reading recovery, balanced literacy
Eight Period Day
FAFSA completion tracking program
Failing students meet with principal and counselor
Focal point on low SES students being successful on EOC/TAKS
Focus on problems that prevent low SES Students from attending
Freshman orientation that encourages college readiness
Friday modified schedule based on campus needs indicated by data
Freshman orientation that encourages college readiness
Gear Up Grant
Grading Policy
Help kids develop a dream/vision for their future
High expectations for students
Higher education coordinator
Involved parents, teachers, and guidance counselors
Locally developed curriculum
Meetings with seniors to discuss financial aid, scholarships and different ways to continue education
Middle school six year college readiness plan
Monthly scholarship email to students

Motivating students to be involved in programs such as band, athletics, FFA and extracurricular activities
Naviance program which focuses on college and career planning
Ninth grade transition classes
Not completing work is treated as a discipline issue
Online Classes
Positive culture and climate
Pre-Advanced Placement Classes
Preparatory classes for PSAT , SAT, PLAN.. THEA, Accuplacer Test
Princeton Review/ higher education advisor offered on campus
Professional Communication Class
Programs such as Upward Bound, Go Center, Avid, project Lead the Way (PLTW) Engineering Program
Project Based Learning (PBL)
Quality staff (teachers, coaches, counselors, etc.) focuses on building relationship with students
Reading class to support reading and writing
Recognize individual family economic situations and provide support to struggling students
Recommended Graduation Plan
Relationship with community college
Reteach Policy
Rigorous coursework in high school
RTI –Response to Intervention
Senior meeting to discuss college readiness
Share the results of tests such as Explore and STAAR as early as possible
Small classes and group study sessions
Small, rural school
Sophomores take Geometry and Math Models (non-high math track students)
Staff development based on assessment data disaggregation
Students take two science classes during their junior year
Students who are not performing are required to lose an elective for accelerated instruction
Summer School
Supportive Administration/School Board
Talent Search Grant
Teacher led instruction is priority, even for computer based instruction
Technology and curriculum that can be used at home and at school
Teen Leadership Class
Tutorial based advisory class offered during and after school, during lunch, or on Saturday
Visit to local colleges

Round 3 Survey List

What is the name of your school
Advisory class focused on monitoring student progress.
Attendance rates of 98 percent or better
Campus benchmark testing/common assessments in core classes
CATE Program
College Signing/Celebration Day where seniors sign letters of commitment to attend college
College Vision Day where past graduates return to visit with students
Community members encourage and support higher education
Content area teachers meeting to review student progress and data
Develop independent learners with good organization skills
Dual Credit Courses
Early interventions at elementary level- Reading recovery, balanced literacy
FAFSA completion tracking program
Failing students meet with principal and counselor
Focal point on low SES students being successful on EOC/TAKS
Focus on problems that prevent low SES Students from attending college
Freshman orientation that encourages college readiness
Help kids develop a dream/vision for their future
High expectations for students
Higher education coordinator
Involved parents, teachers, and guidance counselors
Meetings with seniors to discuss financial aid, scholarships and different ways to continue education
Monthly scholarship email to students
Motivating students to be involved in programs such as band, athletics, FFA and extracurricular activities
Positive culture and climate
Pre-Advanced Placement Classes
Preparatory classes for PSAT, SAT, PLAN.. THEA, Accuplacer Test
Quality staff (teachers, coaches, counselors, etc.) focuses on building relationship with students
Reading class to support reading and writing
Recognize individual family economic situations and provide support to struggling students
Recommended Graduation Plan
Relationship with community college
Reteach Policy
Rigorous coursework in high school
RTI –Response to Intervention
Senior meeting to discuss college readiness
Share the results of tests such as Explore and STAAR as early as possible

Small classes and group study sessions
Small, rural school
Staff development based on assessment data disaggregation
Supportive Administration/School Board
Talent Search Grant
Teacher led instruction is priority, even for computer based instruction
Technology and curriculum that can be used at home and at school
Tutorial based advisory class offered during and after school, during lunch, or on Saturday
Use student data to determine where curriculum and instructional needs to be strengthened
Visit to local colleges

REFERENCES

Achieve, Inc. (2004). *Ready or not: Creating a high school diploma that counts*. Prepared for The American Diploma Project. Washington, D.C. Retrieved February 4, 2012 from http://www.achieve.org/files/ADPreport_7.pdf.

Achieve, Inc. (2009). *Ready or not: Creating a high school diploma that counts*. Washington, D.C. Retrieved from http://www.achieve.org/files/ADPreport_7.pdf.

ACT (2005). *Crisis at the core: Preparing all students for college and work access*. Iowa City, IA: ACT, Inc.

ACT (2009*). Measuring college and career readiness: The class of 2009*. Iowa City, IA: ACT

ACT (2011). *The condition of college and career readiness*. Iowa City, IA: ACT, Inc.

Adams, M., Bell, L. & Griffin, P., (1997). Teaching for diversity and social justice: A sourcebook. New York, NY: Routledge.

Adelman, C. (1999*). Answers in the tool box: Academic intensity, attendance patterns, and bachelor's degree attainment*. Washington, DC: U.S. Department of Education.

Adelman, C. (2006). *The toolbox revisited; Paths to degree completion from high school through college.* Washington, D.C.: Department of Education.

Advisory Committee on Student Financial Assistance (2001*). Access denied: Restoring the nation's commitment to equal educational opportunity*. Washington, DC: Advisory Committee on Student Financial Assistance.

Alexander, K., Eutwisle, D., & Olson, L. (2007). Summer learning and its implications: Insights from the beginning school study. *New Directions for Youth Development, 114,* 11-32. doi:10.1002/yd.210

Alliance for Excellent Education. (2006). *Paying double: Inadequate high school and community college remediation.* Washington, D.C. Retrieved February 4, 2012 from http://www.all4ed.org/files/archive/publications/remidation.pdf

AVID (2005). *Awareness participant materials*. San Diego, CA: AVID Press.

Ayers, W., Hunt, J., & Quinn, T. (1998). Teaching for social justice. New York, NY: The New Press & Teachers College Press.

Balfanz, R. (2009). Can the American high school become an avenue of advancement for all? *The Future of Children, 19,* 17-38. doi: 10.1353/foc.0.0025

Barnes, J. (1987). *An international study of curricular organizers for the study of technology*; Unpublished doctoral dissertation, Virginia Polytechnic Institute and State University, Blacksburg, VA.

Barton, P. & Coley, R. (1996). Testing in America's schools: Policy information report. Princeton, NJ: Educational Testing Policy Information Center. (ERIC Document Reproduction Service No. ED 366616).

Beach, L. (2006). Leadership and the art of change: *A practical guide to organizational transformation.* Thousand Oaks, CA: Sage Publications.

Bennett, A, Bridglall, B., Cauce, A., Everson, H., Gordon, E., Lee, C., Mendoza-Denton, R., Renzulli, J., & Stewart, K. (2004). *All students reaching the top: Strategies for closing the academic achievement gaps.* Naperville, IL: Learning Point Associates. Retrieved from http://apcentral.collegeboard.com/apc/members/repository/ap04_allstudents_39695.pdf

Blackburn, S. (2008). *Oxford dictionary of philosophy* (2nd ed). Oxford, UK: Oxford University Press.

Borkowski, J. W., & Sneed, M. (2006). Will No Child Left Behind improve or harm public education? *Harvard Educational Review, 76,* 503-525.

Brinson, D., Kowal, J., & Hassel, B. C. (2008). *School Turnarounds: Actions and results.* Lincoln, IL: Center on Innovation and Improvement. Retrieved from http://www.centerii.org/survey/downloads/Turnaround%20Actions%20and%20Results%203%2024%2008%20with%20covers.pdf

Brown v. Board of Education, 347 U. S. 48.3 (1954). Retrieved from http://laws.findlaw.com/us/347/483.html

Bush, G. W. (2001). *No Child Left Behind.* Washington DC.: The White House. Retrieved from https://www.whitehouse.gov/news/reports/no-child-left-behind.pdf

Caldas, S. (1993). Reexamination of input and process factor effects on public school achievement. *Journal of Educational Research, 86,* 206-214. doi:10.1080/00220671.1993.9941832

Carter, P. (2003). Black cultural capital, status positioning, and school conflicts for low income African American. *Social Problem, 50,* 136-155. doi:10.1525/sp.2003.50.1.136

Chenoweth, K. (2007). *It's being done: Academic success in unexpected schools*. Cambridge, MA: Harvard Educational Press.

Chester, C., Jones, D., Zalot, A., & Sterrett, E. (2007). Psychosocial adjustment of African American youth from single mother homes: The relative roles of parents and peers. *Journal of Clinical Child and Adolescent Psychology*, *36,* 356-366.

Christenson, S., Palan, R., & Scullin, S. (2009). Family-school partnerships: An essential component of student achievement. *Principal Leadership*, *9,* 10-16.

Clayton, M. (1997). Delphi: A technique to harness expert opinion for critical decision making in education. *Educational Psychology, 17,* 373. doi:10.1080/0144341970170401

Cobb, C. (2004). Looking across the states: Perspectives on school accountability. *Educational Foundations*, *18*. 59-79.

Coleman, J. E., Campbell, C., Hobson, J., McPartland, A., Mood, F., Weinfield, & York, R. (1966). *Equality of education opportunity.* Washington, DC: U.S. Government Printing Office.

College Board (2011). *2011 college bound seniors*. New York, NY: College Board.

Conley, D. (2003). *Standards for success*: *What it takes to succeed in entry level university courses*. Paper presented at the annual meeting of the American Association of Colleges and Universities, Seattle, WA.

Conley, D. T, Aspengren, K., Stout, O., & Veach, D. (2006). *College Board Advanced Placement best practices course study report*. Eugene, OR: Educational Policy Improvement Center.

Conley, D. T. (2007a). Challenges of college readiness. *Educational Leadership*. *64,* 23-29.

Conley, D. T. (2007b). *Redefining college readiness* (Vol. 5). Eugene, OR: Educational Policy Improvement Center.

Conley, D. T. (2008). *College readiness and high school-to-college success*. Presented at the Aspen Institute. Eugene, Or.

Conley, D. T. (2011). *Redefining college readiness* (Vol. 5). Eugene, OR: Educational Policy Improvement Center.

Cotton, K. (1996). *Affective and social benefits of small-scale schooling.* West Virginia: Eric Clearinghouse on Rural Education and Small Schools. (ERIC No. ED 401088.)

Creswell, J. W. (2003). *Research design: Qualitative, quantitative, and mixed methods approaches.* Thousand Oaks, CA: Sage.

Crosby, E. (1993). The "At-Risk" Decade. *Phi Delta Kappan, 74,* 598-604.

Cunningham, A., Redmond, C., & Merisotis, J. (2003). *Investigating early intervention programs in selected U.S. states.* Montreal, Canada: Institute for Higher Education Policy.

Custer, R. L., Scarcella, J. A., & Stewart, B. R. (1999). The modified Delphi technique: A rotational modification. *Journal of Vocational and Technical Education, 15*, 1-10.

Cyphert, R. L. & Grant, W. L. (1971). The Delphi Technique: A case study. *Phi Delta Kappan, 52*, 272-273.

Darling-Hammond, L. (2006). No Child Left Behind and high school reform. *Harvard Educational Review, 76*, 642-667.

Deal, T., & Peterson, K. (1999). *Shaping school culture: The heart of leadership*. San Francisco, CA: Josey-Bass.

Denzin, N.. & Lincoln, Y. (1994). Introduction: Entering the field of qualitative research. In N.K. Denzin and Y. S. Lincoln (Eds.) *Handbook of Qualitative Research*. pp. 1-18. Thousand Oaks, CA: Sage.

Dounay, J. (2006). *Advanced placement*. Denver, CO: Education Commission of the States.

D'Souza, E. (2000). Avid mathematics staff development and it effects on middle school achievement. (Doctoral Dissertation, Claremont Graduate University). UMI No. 9956031.

Duke, D. L. (2006). Keys to sustaining successful school turnaround. *ERS Spectrum, 24*, 21-25.

EdSource (2006). *Similar students, different results: Why do some schools do better?* Mountain View, CA.

Education Trust (1999). *Dispelling the myth: High poverty schools excelling expectations*. Washington, D.C.

Epstein, J. (1995). School, family, community partnerships: Caring for the children we share. *Phi Delta Kappan, 79,* 701-712.

Epstein, J. (2001). *School, family, and community partnership: Preparing educators and improving schools.* Boulder, CO: Westview Press.

Epstein, J. (2005). Links in a professional development chain: Preservice and inservice education for effective programs of school, family, and community partnerships. *The New Educator*, *1,* 125-141. doi:10.1080/15476880590932201

Eriksen, J, & Stjernfelt, F. (2009). Culturalism: Culture as political ideology. Retrieved from www.eurozine.com

Farkas, G., Goobe, R., Sheehan, D., & Shuan, Y. (1990). Cultural resources and school success: Gender, ethnicity, and poverty groups within an urban school district. *American Sociology Review*, *55,* 127-142. doi:10.2307/2095708

Fashola, O., & Slavin, R. (1998). Schoolwide reform models: What works? *Phi Delta Kappan.*

Foy, J. (2002). Effects of the advancement via individul determination (AVID) program on minority student achievement. (Doctoral Dissertation, Virginia Polytechnical Institute and State University). UMI No. 1409187.

Friedkin, N., & Neocochea, J. (1988). School system size and performance: A contingency perspective. *Educational Evaluation and Policy Analysis, 10,* 237-249. doi:10.2307/1163956

Fryer, R., & Levitt, S. (2004). Understanding the black-white test score gap in the first two years of school. *Review of Economics and Statistics. 86*, 447-464. doi:10.1162/003465305323031049

Goals 2000: Educate America Act, 20 USC § 101 and 102 enacted March 31, 1994. Retrieved from: http://lamar.colostate.edu/~hillger/laws/goals-2000.html

Gold, B. (2007). *Still separate and unequal: Segregation and the future urban school reform.* New York, NY: Columbia University Press.

Griffith, M. (2003). *Action for social justice in education: Fairly different*. Philadelphia, PA: Open University Press.

Hamilton, L., Stecher, B., Marsh, J., McCombs, J., Robyn, A., Russell, J., Naftel, S., & Barney, H. (2007). *Standards-Based Accountability under No Child Left Behind: Experiences of teachers and administrators in three states*. Santa Monica, CA: RAND.

Harris, D. (2007). High-flying schools, student disadvantage, and the logic of NCLB. *American Journal of Education*, *113*. 367. doi:10.1086/512737

Haycock, K. (2010). Building common college-ready standards. *Change*, *42*, 14-19. doi:10.1080/00091383.2010.490464

Herman, R., Dawson, P., Thomas D., Greene, J., Maynard, R., Redding, S., & Sarwin, M. (2008). *Turning Around Chronically Low Performing Schools: A Practice Guide (NCEE 2008-4020)*. Washington, D.C.: U.S. Department of Education, Institute of Education Science, National Center for Education Evaluation and Regional Assistance. Retrieved from http://www.eric.ed.gov/ERICWebPortal/search/detailmini.jsp?_nfpb=true&_&ERICExtSearch_SearchValue_0=ED501241&ERICExtSearch_SearchType_0=no&accno=ED501241

Holzer, H. J., & Lerman, R. I. (2009). *The future of middle skilled jobs.* Washington, D.C.: Brookings Institution.

Houtenville, A. & Conway, K. (2008). Parental effort, school resources and student achievement. *The Journal of Human Resources, 43,* 437-453.

Howley, C. (1996). Compounding disadvantage: The effects of school and district size on student achievement in West Virginia. *Journal of Research in Rural Education, 12*. 25-32.

Howley, C. & Bickel, R. (1999). *The Matthew project: National Report*. Randolph, VT. Rural Challenge Policy Program.

Howley, C., & Howley, A. (2004). School size and the influence of socioeconomic status on student achievement: Confronting the threat of size bias in national data sets. *Education Policy Analysis Archives, 12*.

Howley, C., Strange, M., & Bickel, R. (2000). Research about school size and school performance in impoverished communities. *Eric Clearinghouse on Rural Education and Small Schools.* Charleston, NC: ERIC

Hsu, C., & Sandford, B. A. (2007). The Delphi technique: Making sense of consensus. *Practical Assessment Research & Evaluation*, 12.

JBHE (1999). This wasn't supposed to happen: The Black-White SAT gap is actually growing larger. *The Journal of Blacks in Higher Education*, *25*, 95-100.

Jeynes, W. (2007). Religion, intact families and the achievement gap. *Interdisciplinary Journal of Research on Religion*, *3*, 3-24.

Johnson, J. (2004) *Small works in Nebraska: How poverty and the size of school systems affect school performance in Nebraska*. Retrieved from http://files.ruraledu.org/issues/small.htm.

Kachigan, S. (1991). *Multivariate statistical analysis: A conceptual introduction*. (2nd ed.). New York, NY: Radius.

Kannapel, P., & Clements, S. (2005). *Inside the black box of high performing, high poverty schools.* Lexington, KY.: Prichard Committee for Academic Excellence.

Knapp, L. G., Kelly-Reid, J. E., Whitmore, R.W., and Miller, E. (2007). *Enrollment in postsecondary institutions, Fall 2005; Graduation Rates, 1999 and 2002 Cohorts; and Financial Statistics, Fiscal Year 2005* (NCES 2007-154). U.S. Department of Education. Washington, DC: National Center for Education Statistics. Retrieved from http://n ces.ed.gov/pubs2007/2007154.pdf

Kilgo, M. (2010). *Identifying gaps in Margaret Kilgo's Data-driven decisions.* Conference conducted at the University of Texas J.J. Pickle Research Center. Austin, TX.

Kim, J., & Sunderman, G. (2004). *Large mandate and limited resources: State response to the NoChild Left Behind Act and implications for accountability.* Cambridge, MA: The Civil Rights Project at Harvard University.

Kober, N., Zabala, D., Chudowsky, N., Chudowsky, V., Gayler, K., & McMurrer, J. (2006). *State high school exit exam 2006 annual report: A challenging year*. Washington, DC

Kotter, J. (1996*). Leading change*. Boston, MA: Harvard Business School Press.

Land, D. (2002). Local school boards under review: Their role and effectiveness in relation to students' academic achievement. *Review of Educational Research*. *72*, 229-277. doi:10.3102/00346543072002229

Lee, J. (1998). State policy correlates of the achievement gap among racial and social groups. *Studies in Educational Evaluation, 2,* 137-152. doi:10.1016/S0191-491(98)00008-X

Lee, J. (2002). Racial and ethnic achievement gap trends: Reversing the progress toward equity? *Educational Researcher, 31*, 3-12. doi:10.3102/0013189X031001003

Levine, D. (1998). *Working in the twenty-first century: Policies for economic growth through training opportunity and education*. New York, NY: Sharpe.

Lindsey, D. (2009). *Child poverty and inequality: Securing a better future for children.* New York, NY: Oxford University Press.

Linstone, H., & Turoff, M. (1975). *The Delphi Method: Techniques and applications*. New York, NY: Addison Wesley.

Ludwig, B. (1997). Predicting the future: Have you considered using the Delphi methodology? *Journal of Extension, 35,* 1-4.

Martinez, M., & Klopott, S. (2005). The link between high school reform and college access and success for low income and minority youth. Washington, D.C.: American Youth Forum, Pathways to College Network.

Marzano, R. J., Pickering, D., & McTighe, J. (1993). *Assessing student outcomes: Performance assessment using the dimensions of learning model*. Alexandria, VA: Association for Supervision and Curriculum Development.

Mass Insight Education and Research Institute. (2007). *The Turnaround Challenge: Why America's best opportunity to dramatically improve student achievement lies in our worst performing schools.* Retrieved from http://www.massinsight.org/resourcefiles/TheturnaroundChallemge_2007.pdf

McClure, P. (2008). The history of educational comparability in Title I of the Elementary and Secondary Education Act of 1965. In J. Podesta & C. Brown (Eds.). *Ensuring equal opportunity in public education: How local school district funding practices hurt disadvantaged students and what federal policy can do about it.* Washington, D.C.: Center for American Progress.

McDonough, P. (1997). *Choosing colleges. How social class and schools structure opportunity*. Albany, NY: State University of New York Press.

McDonough, P. (2004). Counseling matters: Knowledge, assistance, and organizational commitment to college preparation in W. G. Tierney (Ed.*). Nine propositions relating to the effectiveness of college preparation programs*. New York, NY: State University of New York Press.

Moustakes, C. (1994). *Phenomenological research methods*. Thousand Oaks, CA: Sage Publication.

National Commission on Excellence in Education. (1983). *A nation at risk: An imperative for educational reform.* Washington, D.C.

National Research Council. (2002). *Learning and understanding: Improving advanced study of mathematics and science in U.S. high schools*. Washington, DC: National Academies Press.

National Survey of Student Engagement. (2006). *Engaging learning: Fostering success for all students.* Bloomington, IN: Center for Postsecondary Research.

Orfield, G. (1997). Does desegregation help close the gap? *Journal of Negro Education, 66*, 241-254. doi:10.2307/2967163

Patten, M. (2007) Understanding research methods: An overview of the essentials. (6th ed) Glendale, CA: Pyrczak

Peterson, K, & Deal, T. (2002). *The shaping school culture field book.* San Francisco, CA: Josey-Bass.

Pinkus, L. (2006). *Who's counted? Who's counting? Understanding high school graduation rates.* Washington, DC: Alliance for Excellent Education.

Ploeg, A., & Thum, Y. (2004). *Finding additional value in new accountability systems.* Retrieved from http://www.ncrel.org/policy/pubs/pdfs/value.pdf

Rist, R. (1973). *The urban school: A factory for failure*. Cambridge, MA: MIT Press

Rivkin, S., Hanushek, E., & Kain, E. (2005). Teachers, Schools, and Academic Achievement. *Econometrica, 73,* 417-458. doi:10.111/j.1468-0262.2005.00584.x

Roderick, M., Nagaoka, J., & Coca, V. (2009). College readiness for all: The challenge for urban high schools. *The Future of Children*. *19,* 185-207.

Schneider, C. (2003). Preparing students for what? School-college alignment in an era of great expectations. *Peer Review, 5,* 13-16.

Scott, W. (1995). *Institutions and organizations*. Newbury Park, CA: Sage.

Scott, W. & Davis, G. (2007). *Organization and organizing: Rational, natural, and open systems perspectives*. Upper Saddle River, NJ: Pearson.

Seginer, R. (1983). Family learning environment: The subject vie of adolescent males and females. *Journal of Youth and Adolescent, 14,* 121-131.

Silva, E. (2008). *The Benwood Plan: A lesson in comprehensive teacher reform.* Washington, D.C.: Education Sector.

Sirin, S. (2005). Socioeconomic status and academic achievement: A meta-analytical review. *Review of Educational Research, 75,* 417-453. doi:10.3102/00346543075003417

Smith, K & Bers, T. (1989). Parents and the college choices decisions of community college students. *College and University, 64,* 335-348.

Standards for Success. (2003). *An introduction to work samples and their uses.* Eugene, OR: Center for Educational Policy Research.

Stewart, L. (2009). Achievement differences between large and small schools in Texas. *The Rural Educator. 30,* 20-28.

Sunderman, G., Kim, J. & Orfield, G. (2005). NCLB *meets school realities: Lessons from the field.* Thousand Oaks, CA: Corwin

Swail, W., & Perna, L. (2002). Pre-college outreach program. In W. Tierney & L. Hagedorn (Eds.), Handbook or research on multicultural education. San Francisco, CA: Josey-Bass.

Swanson, M., Marcus, M., & Elloit, J. (2000). Rigor with support: Lessons from AVID: Advancement Via Individual Determination. *Leadership. 30,* 26-7, 37-8.

Terenzini, P., Cabrera, A., & Bernal, E. (2001). *Swimming against the tide: The poor in American higher education* (Research Report No 2001-1). New York, NY: College Entrance Examination Board.

Texas Education Agency. (2010a). *Academic Excellence Indicator System.* Austin, TX: TEA. Retrieved from: http://ritter.tea.state.tx.us/perfreport/aeis/

Texas Education Agency. (2010b). *2010 accountability manual: The 2010 accountability rating system for Texas public schools and school districts.* Austin, TX: TEA

Texas Education Agency. (2010c). *Texas college and career readiness standards more comprehensive than national standards*. Austin, TX

Texas Legislative Budget (2007). Legislative Budget Board. *Public high school to college transitions: Barriers and best practices- A snapshot of Texas with in a national context.* Retrieved from www.lbb.state.tx.us.

U.S. Department of Education, National Center for Education Statistics (2004). *The condition of education 2004* (NCES 2004–077). Washington, D.C.: U.S. Government Printing Office.

U.S. Department of Education, National Center for Education Statistics. (2006). *The condition of education 2006* (NCES 2006-071). Washington, D.C.: U.S. Government Printing Office.

U. S. Department of Education (2006a). Table 7.3. *Median annual earnings of full-time, full-year wage and salary workers ages 25–34, by highest level of educational attainment and race/ethnicity: 2006* . Retrieved from Status and Trends in the Education of American Indians and Alaska Natives: http://nces.ed.gov/pubs2008/nativetrends/tables/table_7_3.asp

U.S. Department of Education (2006b). *A Test of leadership: Charting the future of U. S. higher education*. Washington, D.C.. Department of Education.

U.S. Department of Education (2010). *College and career ready standards and assessment. A blueprint for reform: The Reauthorization of the Elementary and Secondary Education Act*.

U.S. Department of Education (2009). *State and local implementation of the No Child Left Behind Act, Volume VI-Targeting and Uses of Federal Education Funds. By Jay Chambers, Irene Lam, Kanya Mahitivanichcha, Phil Esra, Larisa Shambaugh, and Stephanie Stullich.* Washington, D.C.: U.S. Department of Education, Office Plannig, Evaluation, and Policy Development, Policy and Program Studies Services.

U. S. Department of Education (2002). *The No Child Left Behind Act, Title I: Improving the academic achievement of the disadvantaged.* Retrieved from http://ed.gov./omots/nclb/part3html.

U.S. Department of Education, National Center for Education Statistics (2011). Washington, DC: U.S. Government Printing Office.

Viadero, D. & Johnston, R. (2000). *Lags in minority achievement defy traditional explanations: The achievement gap*. Retrieved from ERIC database (ED458335)

Viadero, D. & Johnston, R. (2009). Lifting minority achievement: Complex answers. *Education Week. 19,* 14-16.

Wade, R. (2001). Social action in the social studies: From the ideal to the real. *Theory Into Practice, 40,* 23-28.

Walberg, H. J. (2007). Changing and monitoring instruction. In H. J. Walberg (Ed.), *Handbook on restructuring and substantial school improvement*. Lincoln, Il: Academic Development Institute.

Weaver, W. (1971). The Delphi forecasting method. *Phi Delta Kappen*. *58,* 267-271.

BIOGRAPHICAL INFORMATION

Theodis Lamar Goree, Jr. has been in public school education for over 17 years. He received his Bachelor of Arts in Management from Morehouse College, teacher certification from Kennesaw University, Master of Education in Educational Leadership from The University of Texas at Arlington and superintendent certification from The University of Texas at Arlington. He has served as a middle school teacher, middle school assistant principal, middle school principal, high school principal, assistant superintendent, and area superintendent. He has enjoyed providing leadership to campus level administrators and teachers. He currently resides in Grand Prairie, Texas with his wife of 18 years and two children. He is interested in continuing his research on factors that high school should possess that will increase the college ready rates of low-SES students. Lamar enjoys spending time with his family and friends.