ADMINISTRATIVE LEADERSHIP EFFECT ON COLLEGE ENTRANCE EXAMINATION PARTICIPATION AND PERFORMANCE

A Doctoral Thesis Presented to the
Faculty of the College of Education
University of Houston

In Partial Fulfillment
Of the Requirements for the Degree

Doctor of Education
in Professional Leadership

by
Cory A. Collins

May 2015

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Abstract

College entrance exam scores, namely the SAT and ACT, are an important criteria for students applying for admission to their college of choice. Clinedinst, Hurley, and Hawkins (2012) stated that almost ninety percent of colleges and universities ranked college entrance exam scores as considerately or moderately important in the admission process, and more than 1.6 million high school graduates participated in taking the SAT and/or ACT in 2012. With college entrance exams having such a profound impact on college admission and with the existence of large achievement gaps, it becomes a responsibility of school leaders to work towards improvement of participation and performance on SAT and ACT. This study investigated leadership practices that have positive impact on college entrance exam participation and performance. The study analyzed SAT and ACT data in identified high performing Texas high school campuses, campus groups as identified by Texas AEIS reports, and state averages. Selected Texas public school districts and high schools were contacted to participate in interviews that sought to identify leadership actions associated with their identified strengths in the area of SAT and ACT participation and performance. This study used the archival data from the Texas AEIS report and College Entrance exam reports together with collected interviews of school leaders. The study identified practices that will inform and influence school leaders to improve student participation and performance on SAT and ACT.

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Chapter I

Introduction to the study

College entrance exam scores, namely the SAT and ACT, continue to be an important criterion for students applying for admission to their college of choice. According to Clinedinst, Hurley, and Hawkins (2012), almost ninety percent of colleges and universities ranked college entrance exam scores as considerably or moderately important in the admission process, and more than 1.6 million high school graduates participated in taking the SAT and/or ACT in 2012. Clinedinst (2012) continues to explain that "significant gaps in exam performance among different racial and ethnic groups have remained constant for both exams, and he notes that there has been very little change in the gaps over the last ten years" (p. 40). Anderson (2010) explains that research has focused on four groups of factors on the topic of achievement gaps. He stated that "factors that impact achievement gaps include student characteristics, family characteristics, school-based characteristics, and socio-cultural factors" (p. 1). Anderson illustrates that the "factors with the most significant impact to student performance on SAT and ACT are the student academic characteristics which include high school grade point average (HSGPA), coursework, and test preparation" (p. 3). Adams (2011) quotes Lisa Sohmer, director of college counseling at the Garden School in Jackson Heights New York as saying, "The best test preparation for college admissions tests is good math and English classes in high school" (p.10). Clinedinst (2012) noted that college preparatory courses and strength of curricula are two of the most highly weighted factors

in college admissions. Despite the importance of rigorous coursework, NACAC's Counseling Trends Survey revealed differences among types of schools that offer college preparatory classes as well as the proportion of students enrolled in these courses (Clinedinst, Hurley, & Hawkins, 2012, p. 38).

With college entrance exams having such a profound impact on college admission and with the existence of large achievement gaps, it becomes a responsibility of school leaders to work towards improvement. Leithwood, Patten, and Jantzi (2010) explain that "school leaders can improve student learning in many ways" (p.698). More specifically Leithwood's research (2010) "found positive effects of leadership on student achievement in the areas of leadership practices, academic press, and disciplinary climate" (p. 688). This study investigated leadership practices that have positive impact on SAT and ACT participation and performance.

Leadership practices

The Council of Chief State School Officers [CCSSO] (2008), with contributions from the National Policy Board for Educational Administration and The Wallace Foundation, developed the Interstate School Leaders Licensure Consortium, otherwise known as the ISLLC, and set forth six Educational Leadership Policy Standards for effective school leadership. The following standards represent the latest set of high-level policy standards for education leadership. ISLLC standards "provides guidance to state policy makers as they work to improve education leadership preparation, licensure, evaluation, and professional development" (The Council of Chief State School Officers [CCSSO], 2008, p. 1). Marzano (2005) identified twenty-one behavior categories that

school leaders demonstrate which have correlations with student achievement, and he found an average correlation of .25 between leadership practices and student achievement. Marzano's twenty-one behavior categories, which he labels responsibilities, match up well with the six ISLLCC Educational leadership policy standards. Similarities between Marzano's study and the ISLLC standards are noted below. The average correlation of each of Marzano's leadership responsibilities to student academic achievement is noted by the decimal in parentheses.

1) ILSSC Standard 1 – "An educational leader promotes the success of every student by facilitating the development, articulation, implementation, and stewardship of a vision of learning that is shared and supported by all stakeholders. Functions of standard 1 include (a) collaboratively develop and implement a shared vision and mission; (b) collect and use data to identify goals, assess organizational effectiveness, and promote organizational learning; (c) create and implement plans to achieve goals; (d) promote continuous and sustainable improvement; and (e) monitor and evaluate progress and revise plans" (CCSSO, 2008, p. 14).

   a. ISLLC Standard 1 strongly relates to six of Marzano's (2005) leadership responsibilities:

      i. Change Agent (.25) – is willing to challenge and actively challenges the status quo

      ii. Flexibility (.28) – adapts leadership behavior to current needs and is comfortable with dissent

    iii. Focus (.24) – establishes clear goals and keeps those goals in the forefront of the school's attention

    iv. Input (.25) – involves teachers in the design and implementation of important decisions and policies

    v. Optimizer (.20) – inspires and leads new and challenging innovations

    vi. Situated Awareness (.33) – aware of detail and undercurrents in the running of the school and uses this information to address current and potential problems

2) ISLLC Standard 2 – "An educational leader promotes the success of every student by advocating, nurturing, and sustaining a school culture and instructional program conducive to student learning and staff professional growth. Functions of standard 2 include (a) nurture and sustain a culture of collaboration, trust, learning, and high expectations; (b) create a comprehensive, rigorous, and coherent curricular program; (c) create a personalized and motivating learning environment for students; (d) supervise instruction; (e) develop assessment and accountability systems to monitor student progress; (f) develop the instructional and leadership capacity of staff; (g) maximize time spent on quality instruction; (h) promote the use of the most effective and appropriate technologies to support teaching and learning; and (i) monitor and evaluate the impact of the instructional program" (CCSSO, 2008, p. 14).

a. ISLLC Standard 2 strongly relates to nine of Marzano's (2005) leadership responsibilities:

    i. Affirmation (.19) – recognizes and celebrates accomplishments and acknowledges failures

    ii. Contingent rewards (.24) – recognizes and rewards individual accomplishments

    iii. Communication (.23) – establishes strong lines of communication among teachers and students

    iv. Culture (.25) – fosters shared beliefs and a sense of community and cooperation

    v. Intellectual stimulation (.24) – ensures faculty and staff are aware of the most current theories and practices and makes the discussion of these a regular aspect of the school's culture

    vi. Involvement in curriculum and instruction (.20) – is directly involved in the design and implementation or curriculum, instruction, and assessment practices

    vii. Knowledge of curriculum and instruction (.25) – is knowledgeable about current curriculum, instruction, and assessment practices

    viii. Relationships (.18) – demonstrates an awareness of the personal aspects of teachers and staff

        ix. Visibility (.20) – has quality contact and interactions with

            teachers and students

3) ISLLC Standard 3 – "An educational leader promotes the success of every

student by ensuring management of the organization, operations, and

resources for a safe, efficient, and effective learning environment. Functions

of standard 3 include (a) monitor and evaluate the management and

operational systems; (b) obtain, allocate, align, and efficiently utilize human,

fiscal, and technological resources; (c) promote and protect the welfare and

safety of students and staff; (d) develop the capacity for distributed leadership;

and (e) ensure teacher and organizational time is focused to support quality

instruction and student learning" (CCSSO, 2008, p. 14).

    a. ISLLC Standard 3 strongly relates to three of Marzano's (2005)

       leadership responsibilities:

        i. Discipline (.27) – protects teachers from issues and influences

            that would detract from their teaching time or focus

        ii. Order (.25) – establishes a set of standard operating procedures

            and routines

        iii. Resources (.25) – provides teachers with materials and

            professional development necessary for the successful

            execution of their jobs

4) ISLLC Standard 4 – "An educational leader promotes the success of every

student by collaborating with faculty and community members, responding to

diverse community interests and needs, and mobilizing community resources. Functions of standard 4 include (a) collect and analyze data and information pertinent to the educational environment; (b) promote understanding, appreciation, and use of the community's diverse cultural, social, and intellectual resources; (c) build and sustain positive relationships with families and caregivers; and (d) build and sustain productive relationships with community partners" (CCSSO, 2008, p. 15).

   a. ISLLC Standard 4 strongly relates to one of Marzano's (2005) leadership responsibilities:

      i. Outreach (.27) – is an advocate and spokesman for the school to all stakeholders

5) ISLLC Standard 5 – "An educational leader promotes the success of every student by acting with integrity, fairness, and in an ethical manner. Functions of standard 5 include (a) ensure a system of accountability for every student's academic and social success; (b) model principles of self-awareness, reflective practice, transparency, and ethical behavior; (c) safeguard the values of democracy, equity, and diversity; (d) consider and evaluate the potential moral and legal consequences of decision-making; and (e) promote social justice and ensure that individual student needs inform all aspects of schooling" (CCSSO, 2008, p. 15).

   a. ISLLC Standard 5 strongly relates to one of Marzano's (2005) leadership responsibilities:

        i. Ideals/Beliefs (.22) – communicates and operates from strong

ideals and beliefs about schooling

6) ISLLC Standard 6 – "An educational leader promotes the success of every

student by understanding, responding to, and influencing the political, social,

economic, legal, and cultural context. Functions of standard 6 include (a)

advocate for children, families, and caregivers; (b) act to influence local,

district, state, and national decisions affecting student learning; and (c) assess,

analyze, and anticipate emerging trends and initiatives in order to adapt

leadership strategies" (CCSSO, 2008, p. 15).

      a. ISLLC Standard 6 strongly relates to two of Marzano's (2005)

leadership responsibilities:

          i. Outreach (.27) - is an advocate and spokesman for the school to

all stakeholders

        ii. Flexibility (.28) - adapts leadership behavior to current needs

and is comfortable with dissent

CCSSO (2008) ISLLC standards along with Marzano's (2005) leadership

responsibilities demonstrate research based practices which are shown to effect student

achievement. SAT and ACT exams are examples of student achievement which district

and campus leaders can impact. Data on SAT and ACT participation and performance

indicate that school leaders should focus their attention in an effort to improve their

students' access and scoring on these exams.

SAT and ACT

TEA (2011), in their report on college admissions testing for 2010 graduating

seniors, identifies participation and performance as indicators on the SAT and ACT.

TEA (2011) data for the class of 2010, as reported in the Academic Excellence Indicator

System, provide that:

- Texas state SAT participation rate for the class of 2010 was 48.3 percent;

- Texas state ACT participation rate for the class of 2010 was 32.7 percent;

- 26.9 percent of SAT/ACT participants met or exceeded AEIS criterion
  performance scores;

- SAT criterion was set at 1110 for critical reading and math sections
  combined;

- ACT criterion was set as a composite score of 24; and

- significant gaps persist in participation and performance rates. (see Table
  1 and Table 2)

Table 1

Texas public school SAT and ACT Performance at or above criterion (2010)

Group	Examinees	Number	Percent
African American	22,291	1,806	8.1
American Indian	704	200	28.4
Asian	8,700	4,523	52.0
Hispanic	57,301	7,303	12.7
Pacific Islander	209	60	28.7
White	67,819	28,060	41.4
Multiracial	2,431	848	34.9
Eco. Disadvantaged	55,601	5,278	9.5
Non-Eco. Disadvantaged	99,993	36,384	36.4
Female	85,507	20,792	24.3
Male	74,176	22,097	29.8
State	159,688	42,889	26.9

(Texas Education Agency [TEA], 2011, table 13)

Table 2

Texas public school SAT participation (2010)

Group	Graduates	Examinees	Participation Percentage
African American	31,764	17,330	54.6
American Indian	1,317	556	42.2
Asian	9,707	7,942	81.8
Hispanic	108,767	41,767	38.4
Pacific Islander	339	171	50.4
White	99,560	53,319	53.6
Multiracial	3,529	1,997	56.6
Eco. Disadvantaged	103,087	39,816	38.6
Non-eco. Disadvantaged	151,896	82,289	54.2
Female	130,397	65,981	50.6
Male	124,586	57,173	45.9
State	254,983	123,154	48.3

(Texas Education Agency [TEA], 2011, table 4)

Statement of the Problem

High school student participation and performance on SAT and ACT exams reveals significant variations between high school campuses and the various ethnic and socio-economic student groups. Some Texas independent school districts and high school leaders implement actions that provide more access to SAT and ACT tests and preparation materials than do their peer districts and high schools. District and campus leaders that implement effective actions are demonstrating greater results in the number of students taking SAT and ACT exams as well as better scoring on those exams. The gap in knowledge exists in leadership practices that are identified to have impact specifically on SAT and ACT participation and performance as well as work to close the gap between student populations.

Purpose of the Study

The purpose of this study is to identify administrative leadership practices that school leaders report to improve participation and performance on SAT and ACT examinations. The study also intends to identify leadership practices that school leaders report to close the gap between student groups in the area of participation and performance on the SAT and ACT. The study intends to share best practices as identified in the studied districts and high schools in an effort to improve participation and performance with all student groups on all high school campuses.

Significance of the Study

This study identified current practices that will influence future leadership practices that impact student participation and performance on SAT and ACT. Finding

from the study will help district and school leaders focus on the specific actions that they can implement to increase the participation and performance of their students. Increased participation of all students could potentially improve the access to student's college admission. Increased performance on SAT and ACT could increase student opportunity to attend college of choice and improve access to financial aid.

Research Design

This exploratory qualitative study identified research based leadership actions that contribute to high levels of student participation and student performance on SAT and ACT. The study compared data between identified high performing Texas high school campuses, state averages, and their campus group peers as identified by Texas AEIS reports. High schools in this study were selected based on set criteria which include:

- the high school will outperform state averages in the categories of participation and performance on the SAT and ACT;

- the high school will outperform their campus group in the categories of participation and performance on the SAT and ACT.

- the high school student population will have 40 percent or greater economically disadvantaged students; and

- the high school student population will be ethnically diverse with 50 percent or greater being identified as Hispanic or African American.

The selected criteria allows for study of high schools that outperform the state and peer school performance while also focusing on high schools with student populations that are representative of the state population. Selected Texas high performing campuses were

contacted to participate in personnel interviews that sought to identify leadership actions associated with their identified strengths in the area of SAT and ACT participation and performance.

Research Questions

The following research questions are intended to guide the study:

1. What leadership actions do school leaders report to influence the participation and performance on the SAT and ACT?

2. What are the similarities and differences in reported leadership actions between the studied districts and high school campuses?

3. How do school leaders report their leadership actions to impact student participation and performance on the SAT and ACT?

4. How do school leaders report their leadership actions to impact closing the achievement gap on participation and performance on the SAT and ACT?

Assumptions and Limitations

Assumptions.

1. School leaders and staff complete interviews honestly.

2. Data used in the study have not been fabricated.

Limitations.

1. Study will only include public Texas high school data.

2. AEIS data will only reflect most recent data published.

3. SAT and ACT data will only reflect most recent data published.

4. Student populations studied, although similar, have natural differences in IQ and other impacting factors.

5. Differences in individual teacher effectiveness, although impactful on student achievement, will not be measured.

Definition of Terms

1. **SAT**: The SAT is a globally recognized college admission test that lets you show colleges what you know and how well you can apply that knowledge. It tests your knowledge of reading, writing and math — subjects that are taught every day in high school classrooms.

2. **ACT**: The ACT is a national college admissions examination that consists of subject area tests in English, Mathematics, Reading, and Science. The ACT Plus Writing includes the four subject area tests plus a 30-minute Writing Test. ACT results are accepted by all four-year colleges and universities in the U.S. The ACT includes 215 multiple-choice questions and takes approximately 3 hours and 30 minutes to complete, including a short break (or just over four hours if you are taking the ACT Plus Writing.) (http://www.actstudent.org/faq/what.html)

3. **AEIS**: The Academic Excellence Indicator System (AEIS) pulls together a wide range of information on the performance of students in each school and district in Texas every year. This information is put into the annual AEIS reports, which are available each year in the fall. The performance indicators for 2011-12 are:

Results of the Texas Assessment of Knowledge and Skills (TAKS*), *note: for 2011-12, TAKS is only available for grades 10 and 11*;

- Exit-level TAKS Cumulative Passing Rates;

- Progress of Prior Year TAKS Failers;

- Attendance Rates;

- Annual Dropout Rates (grades 7-8 and grades 9-12);

- Completion Rates (4-year and 5-year longitudinal);

- College Readiness Indicators;

- Completion of Advanced/Dual Enrollment Courses;

- Completion of the Recommended High School Program or Distinguished Achievement Program;

- Participation and Performance on Advanced Placement (AP) and International Baccalaureate (IB) Examinations;

- Texas Success Initiative (TSI) – Higher Education Readiness Component;

- Participation and Performance on the College Admissions Tests (SAT and ACT), and College-Ready Graduates;

4. **Participation rate**: the percent, of total high school graduates, that took the SAT or ACT. The participation rate may refer percentages at the state, district, and campus level.

5. **Voluntary participation**: Unlike state assessments such as the Texas Assessment of Knowledge and Skills (TAKS), SAT and ACT

examinations are voluntary. Depending on a number of factors, including financial hardship, students may choose to take one or both of the examinations or neither. The College Board and ACT, Inc., have implemented policies to help overcome financial barriers that might otherwise prevent students from taking one or both of the examinations (ACT, Inc., 2010d, College Board, 2010e). For instance, test fee waivers from the College Board and from ACT, Inc., are available to junior and senior high school students based on economic need. In many Texas schools and districts, students who do not meet College Board or ACT, Inc., criteria for financial assistance may receive fee waivers if they meet local criteria and local funding is available.

6. **Performance**: Of students that took the SAT or ACT, this indicator measures their scoring on the respective examination. Performance may be measured as a percent of students that met or exceeded criterion levels set by AEIS for the SAT and ACT.

7. **Economically disadvantaged**: Under Texas Education Agency (TEA) guidelines, a student is identified as economically disadvantaged if he or she is eligible for free or reduced-price meals under the National School Lunch and Child Nutrition Program.

8. **Gold performance acknowledgement**: For a district or campus to meet the GPA standard, as indicated by AEIS, at least 70 percent of non-special education graduates must have taken the SAT and/or ACT, and at least 40

percent of the examinees must have met a criterion score. The criterion for the SAT is a score of 1110 on the critical reading and mathematics sections combined, and the criterion for the ACT is a composite score of 24.

9. **Achievement Gap**: "The difference between how well low-income and minority children perform on standardized tests as compared with their peers" (U.S. Department of Education, n.d.).

Summary

This study introduced the significant role that the SAT and ACT play in college admissions. The aspects which school leaders have control over, namely leadership practices, were introduced with leadership standards and Marzano's (2005) leadership responsibilities. High schools in Texas and across the nation have significant gaps in the participation and performance of various ethnic and socio-economic student groups. The goal of this study was to identify, through qualitative analysis, leadership practices that school leaders report to improve student participation and scoring on college entrance examinations. Chapter 2 will present a review of related literature on the topics of leadership theory, effective school leadership practices, achievement gaps, and college entrance exams.

Chapter II

Literature Review

This study reviewed literature on topics including: leadership theory, research based leadership practices, achievement gap, SAT and ACT. Literature included Transactional and Transformation leadership to effectively describe the evolution of leadership in schools and the relationship between the theories and current practice. Effective school leadership practices and standards were reviewed to provide a body of researched based evidence on the effect of leadership practices in schools. This review of literature is important because it provides a benchmark by which effective school leader's practices may be measured. The literature review also includes descriptions of the achievement gap between student populations in order to provide insight into the gaps in student achievement on the SAT and ACT. Finally, the SAT and ACT tests are described in order to provide background information on tested knowledge and skills as well as general data on participation and performance.

Transactional Leadership

Burns (1978) says, "relations of most leaders and followers are transactional – leaders approach followers with an eye to exchanging one thing for another" (p. 4). He describes transactional leadership as having purpose for individual transactions but goes no further in building relationships for moral purpose or greater human action. Bass (1990) defines four characteristics of transactional leaders as: (a) contingent reward, (b) management by exception (active), (c) management by exception (passive), and (d)

laissez-faire. Bass (1985) finds shortcomings in the singular implementation of transactional leadership. He contends that transactional managers do not fully implement transactional leadership strategies after they are trained. Bass describes inconsistencies in interventions by managers practicing management by exception and failures to provide adequate feedback to employees. Contingent rewards also afford transactional leaders difficulties when they are unable to deliver them with consistency (Bass, 1985). Burns contrasts transactional leadership with transformational leadership, and he explains that transformational leadership occurs when leaders engage followers in higher moral purpose (Bass, 1990).

Transformational Leadership

James MacGregor Burns' (1978) work serves as the basis of the transformational leadership theory (Geijsel, Sleegers, Leithwood, & Jantzi, 2003). According to Burns (1979), the crucial variable between power and leadership is purpose. Burns defines leadership as, "leaders inducing followers to act for certain goals that represent the values and motivations – the wants and needs, the aspirations and expectations – of both leaders and followers" (p. 381). Bass (1990) defines the four characteristics of transformational leaders as: (a) charisma, (b) inspiration, (c) intellectual stimulation, and (d) individualized consideration. These characteristics function to bind the follower and leader in a more enduring relationship, and it increases the moral aspirations that in turn produce higher performance (Burns, 1979). Burns (1979) states, "The function of leadership is to engage followers, not merely to activate them, to commingle needs and aspirations and goals in a common enterprise, and in the process to make better citizens of both leaders and

followers" (p.383). Bass (1990) supports Burns findings about transformational leadership and states:

> "Superior leadership performance – transformational leadership – occurs when leaders broaden and elevate the interests of their employees, when they generate awareness and acceptance of the purposes and mission of the group, and when they stir their employees to look beyond their own self-interest for the good of the group. Transformational leaders achieve these results in one or more ways: They may be charismatic to their followers and thus inspire them; they may meet the emotional needs of each employee; and/or they may intellectually stimulate employees" (p. 21).

Burns (1978) says, "transforming leadership ultimately becomes moral in that is raises the human contact and ethical aspiration of both leader and led, and thus it has a transforming effect on both" (p.20.) Sergiovanni (2005) takes the moral purpose further and examines what he calls the four leadership virtues. He argues that the virtues of hope, trust, piety, and civility provide the leverage needed for school leaders to make necessary school improvements. The four virtues offer strong parallels to the four characteristics of transformational leaders that Bass (1990) described. Sergiovanni's (2005) leadership virtues, hope and trust, align with Bass's leadership characteristics of charisma and inspiration. Sergiovanni (2005) describes hopeful leaders as demonstrating faith in their ideas and having determination to make progress toward their goals. Sergiovanni's (2005) leadership virtues of trust, piety and civility, align with Bass's

leadership characteristics of charisma and individualized consideration. These virtues work to build community and encourage an environment where people can work towards common goals (Sergiovanni, 2005).

Leithwood and Sun (2012) investigated six models of transformational leadership that included 33 leadership practices. They reduced the 33 practices to eleven in order to consolidate similarly identified practices. The eleven practices studied include:

- developing a shared vision and building goal consensus;

- providing intellectual stimulation;

- providing individualized support;

- modeling behavior;

- holding high performance expectations;

- contingent rewards;

- management by exception;

- building collaborative structures;

- strengthening school culture;

- engaging communities; and

- improving the instructional program.

The study produced mixed results between direct and indirect correlations of transformational leadership practices to student achievement, but some practices clearly had stronger correlations than others. For example, building collaborative structures had a positive correlation of .17, and individualized support had a positive correlation of .15.

Positive results were also found using direct effects designs with positive correlations of .15 in math and .18 in reading (Leithwood & Sun, 2012).

In another study conducted by Walumbwa, Lawler, Avolio, Wang, and Shi (2005), it was found that collective and self-efficacy moderates the relationship between transformational leadership practices and work related attitudes such that employees with high efficacy beliefs are likely to respond more positively to transformational leadership. Bass (1990) found similar positive correlations in responses on the Multifactor Leadership Questionnaire (MLQ), and he specifically discovered that "managers that practice transformational leadership were more likely to be seen by their colleagues as satisfying and effective leaders than those who behave like transactional leaders" (p. 21). Leithwood and Jantzi (2006) researched the effect of transformational leadership on students, teachers, and classroom practices. After multiple tests were conducted, three key sets of results include:

- transformational leadership had very strong direct effects on teachers' work setting and motivation;

- transformational leadership effected teachers' classroom practices; and

- leadership explained moderate variation in teachers' classroom practices.

District leadership

Waters and Marzano (2006) completed a meta-analysis that examined 27 different studies on the topic of district leadership impact on student achievement. The meta-analysis included nearly 3,000 school districts and achievement scores of 3.4 million students. Five research questions guided their study.

- "What is the strength of the relationship between leadership at the district level and average student academic achievement in the district?

- What specific district-level leadership responsibilities are related to student academic achievement?

- What specific leadership practices are used to fulfill these responsibilities?

- What is the variation in the relationship between district leadership and student achievement? Stated differently, do behaviors associated with strong leadership always have a positive effect on student achievement?

- Is there a relationship between length of superintendent service and student achievement?"

(Waters & Marzano, 2006, p. 7, 8)

Waters and Marzano (2006) identified six district-level leadership responsibilities that have positive correlations to student achievement. They name the first responsibility as the goal-setting process. The goal-setting process was found to have an average correlation of .24. In the goal-setting process, the superintendent must ensure: (a) developing a shared vision for the goal setting process, (b) using the goal setting process to set goals developed jointly by board and administration, (c) developing goals that reflect values and support quality in achievement, and (d) communicating expectations district and campus leaders (Waters & Marzano, 2006).

The second superintendent responsibility, non-negotiable goals for student achievement and instruction, charges the superintendent to keep district goals focused on

these two primary objectives. This responsibility was found to have average correlation of .33. To be effective in this leadership responsibility, the superintendent must ensure:

- modeling clear understanding of instructional design;

- establishing clear priorities with instructional goals and objectives;

- adopting instructional methodologies that facilitate the efficient delivery of the district's curriculum;

- incorporating varied and diverse instructional methodologies to support multi-racial student population;

- adopting 5-year non-negotiable goals for achievement and instruction; and

- ensuring that a preferred instructional program is adopted and implemented. (Waters & Marzano, 2006).

The third Superintendent responsibility is board alignment with and support of district goals. This responsibility was found to have average correlation of .29. The primary goals noted in the second responsibility must remain the focus of the board. To successfully implement this responsibility, the Superintendent will ensure agreement with the board president on issues including:

- district goals;

- type and nature of conflict in the district;

- the political climate of the school district;

- the nature of teaching/learning strategies to be used in the district;

- providing professional development for board members; and

- the effectiveness of board training (Waters & Marzano, 2006).

The Superintendent must monitor goals for achievement and instruction. This responsibility was found to have average correlation of .27. Practices the Superintendent must implement successfully include:

- using an instructional evaluation program;

- monitoring student achievement;

- managing instructional change;

- annually evaluating principals;

- regularly reporting student achievement data to the board;

- ensuring instructional needs of all student populations are met;

- observing classrooms during school visits; and

- coordinating efforts within the organization to increase reliability of the system (Waters & Marzano, 2006).

The fifth Superintendent responsibility identified by Waters and Marzano is the use of resources to support the goals for achievement and instruction. This responsibility was found to have average correlation of .26. To be effective, the Superintendent must ensure:

- adopting an instructional and resource management system to support the district's instructional philosophy;

- providing necessary teacher and principal staff development;

- providing training to instructional staff in a common but flexible instructional model;

- controlling resource allocations; and

- providing access to professional growth opportunities (Waters & Marzano, 2006)

Effective school leadership standards and practices

Recent research studies have been conducted to study the relationship between school leadership practices and student achievement. The Council of Chief State School Officers [CCSSO] (2008) developed the Interstate School Leaders Licensure Consortium [ISLLC] and set forth six Educational Leadership Policy Standards for effective school leadership. The ISLLC purpose in producing the standards is to "provide guidance to educators and policymakers as they work together to improve education leadership preparation, licensure, evaluation, and professional development" (p.1). Research support for the standards was provided by The Wallace Foundation as well as educational researchers including Kenneth Leithwood and Linda Darling-Hammond. This section will review each of the six standards set forth by the ISLLC and will compare the functions of the standards with other research studies.

Vision

ISLLC Standard 1 states, "An educational leader promotes the success of every student by facilitating the development, articulation, implementation, and stewardship of a vision of learning that is shared and supported by all stakeholders" (CCSSO, 2008, p. 14). One function of ISLLC Standard 1 is to "collaboratively develop and implement a shared vision and mission" (CCSSO, 2008, p.14).

Leithwood and Jantzi (2008) studied the impact of leadership efficacy on student learning. One aspect of their study, setting direction, was described as "identifying and

articulating a vision, fostering the acceptance of group goals, and creating high performance expectations." They also stated, "Visioning and establishing purpose also are enhanced by monitoring organizational performance and promoting effective communication and collaboration" (p. 507). Although only small direct correlations were found in this study on the relationship between leader efficacy and student achievement, significant positive correlations were found between leader efficacy and leader behavior. Another study, conducted by Hallinger and Heck (1998) explored principal's contribution to school effectiveness. The researchers concluded that "the principal's role in shaping the school's direction through vision, mission, and goals came through in these studies as a primary area of influence" (p.187). Leithwood and McAdie (2007), in their article on teacher working conditions, discuss direction setting.

> "Two direction-setting practices of principals significantly influence teachers' stress, individual sense of efficacy and organizational commitment. One of these practices, helping the staff develop an inspiring and shared sense of purpose, enhances teachers' work. The other, holding (and expressing) unreasonable expectations, has quite negative effects" (p.44).

Philip Schlechty (2002), in his book *Working on the Work*, describes his process for taking a vision and making it reality. Schechty (2002) states that:

- beliefs are the primary basis for visions;
- visions work to shape missions and goals;
- missions set strategic goals;
- strategic goals specify actions to be taken; and

- action goals should define activities.

Schlechty (2002) uses the process to lead and change schools by deeply embedding a culture where all staff continually focuses on engaging student work. Marzano, Waters, and McNulty (2005) describe the leadership responsibility, Focus, in their book *School Leadership that Works*. They describe leadership, Focus, as "the extent to which the leader establishes clear goals and keeps those goals in the fore-front of the schools attention" (p. 50). Principals exercise the leadership responsibility of focus when they keep faculty attention on the goals and progress made towards the goals. Geijsel et al. (2003), conducted research that examined the effects of transformational leadership on the commitment of teachers to school reform. Findings from the study demonstrate that transformational leadership practices have a positive correlation to the commitment of teachers. Vision building, which may be described as how teachers feel involved in the development of vision and goals, demonstrated strong positive correlations. Vision building had a correlation of .38 in relation to personal goals, a correlation of .27 in relation to capacity beliefs, and a correlation of .21 in relation to context beliefs.

Another function of ISLLC Standard 1 is, "Collect and use data to identify goals, assess organizational effectiveness, and promote organizational learning" (CCSSO, 2008, p. 14). In their book, *Organizational Learning*, Collinson and Cook (2007) say, "When schools embrace organizational learning, they still have the responsibility of developing students, but they also have the responsibility of developing adult individuals who work in schools and of developing the organization itself" (p.67-68). Collinson and Cook (2007) discuss school professional development of individual teachers and compare it to

organizational development which must involve all stakeholders to learn together in an effort to improve the organization and its performance. They also make comparisons between modern industrial learning and the emerging postmodern style of learning. For example, learning in the modern industrial model is seen as an only an individual achievement, but learning in the emerging postmodern style is both an individual and a collective endeavor. Another comparison demonstrates learning in the modern industrial tradition depends on the learner's IQ while learning in the emerging postmodern style depends on language and communication. Marzano (2005) says it is the responsibility of the school leader to monitor the impact and effectiveness of practices on the campus's goals and student achievement. In order to effectively monitor effectiveness of practice and student achievement, it is necessary for school leaders to effectively use data. Anderson, Leithwood, and Strauss (2010), in their article detailing data use in schools say:

> "District and school efforts to improve student learning are more likely to have a positive effect when the data and the analysis performed by local educators goes beyond the identification of the problem areas to an investigation of the specific nature of and factors contributing to the problem for the students and settings where it is situated. It is not the data use per se that affects the quality of teaching and learning; rather it is the appropriateness of actions taken based on data-informed decisions about the nature of the problem and how it might be solved" (p.321).

Leithwood and Strauss (2010) continue to explain that teachers do not take charge and use data effectively when school leaders do not make data-based action a priority.

Culture and Climate

ISLLC Standard 2 states, "An educational leader promotes the success of every student by advocating, nurturing, and sustaining a school culture and instructional program conducive to student learning and staff professional growth (CCSSO, 2008, p. 14). Sergiovanni (2004) combines leadership with cultural expectations and says, "By definition, leadership and norms go together. Thus the effectiveness of leadership is measured by its effect on cultural norms" (p. 52). Barth (2002) describes the difficulty that school leaders face when they attempt to change culture, and he adds that staff can be resistant to change. Lindahl (2011) researched the critical role of assessing school culture for school improvement. He describes the failures of many school improvement projects and blames the failure on the lack of assessment and planning for the specific culture of the school. Collinson and Cook (2007) researched creating cultures that reward learning, and they discovered that school leaders must prepare themselves individually before they are able to teach their staffs. Leaders must first identify their core values and then find innovative ways to model and work with their staff to make the necessary cultural changes. They propose that "although high-performing leaders work hard to establish a culture that rewards learning, they understand that learning is a reciprocal process" (p.200).

Barth (2006) reviews the different types of adult relationships that he has identified in his work in public schools. He contends that the different types of

relationships in the school make a significant impact on the school culture. The first

relationship he describes is parallel play. Parallel play occurs when educators work in

isolation and lack collaboration in their work efforts. Barth says that parallel play in

schools is costly to the education of children because it creates a deficiency in the shared

knowledge and practices of teachers. Sergiovanni (2004) agrees with Barth and that "the

consequence of such division dilutes what each individual knows and ignores the

collective intelligence that schools might otherwise have" (p.49). Sergiovanni (2004)

explains that the result of parallel play negatively impacts the efforts being made to close

the achievement gap and increase student achievement. Adversarial relationships

between staff in schools can cause problems, and they appear in a variety of contexts.

They negatively affect culture by stifling teacher collaboration and student achievement.

Barth describes congenial relationships as "personal and friendly," and he notes that they

should "not be taken lightly" (p.11). The effects of congenial relationships helps teachers

feel positive about their work experience and adult relationships. Congenial relationships

are important because they are the direct precursor to creating a culture of collegiality.

Sergiovanni (2004) discusses organizational competence and states,

> "Simply put, organizational competence is the sum of everything everybody
>
> knows and uses that leads to increased learning. This competence is not measured
>
> by what we know but also by how much of it we know, how widely it is
>
> distributed, how broad its source is, how much of it is applied collectively, and
>
> how much of it is generated by cooperation with others" (p.49).

Sergiovanni (2004) says that the ultimate goal is to establish collaborative

cultures in our schools. In his article, "Collaborative Cultures & Communities of

Practice," he interviews the principal and teachers from Adlai Stevenson high school in

Lincolnshire, Illinois. Sergiovanni (2004) along with principal Dan Galloway, describe

the learning community that has been successful at Stevenson High School. Together

they describe a learning community where every person understands their role and

responsibilities. The leadership structure is flat, and they believe in and are committed to

distributing leadership responsibilities amongst the staff. Sergiovanni (2004) explains

that "communities of practice emerge as a result or teachers' need to cooperate.

Collaborative cultures are more deliberate, having been initiated and supported by the

leaders above" (p. 51). Although difficult to cultivate, collegial relationships in the

school environment are ideal for positive culture and student achievement to thrive. Key

elements involved in collegial relationships include: talking about practice, sharing craft

knowledge, observing one another, and rooting for one another to succeed. In order to

build a collegial environment at school, Barth suggests that leaders take action. Leaders

must explicitly state collegial expectations, model appropriate behavior for the staff,

reward staff for their efforts, and shield staff who engage in collegial behavior from

resistant staff members (Barth, 2006).

Recent studies indicate that staff development effectiveness is strongly correlated

to actions taken by school leaders, and according to Schlechty (2002), "Staff

development is at the heart of what principals should be doing in their role of leaders of

instructors" (p.59). Collinson and Cook (2007) state that schools have the responsibility

of developing adult individuals who work in schools and developing the organization itself. Professional learning experiences may result in important individual learning but organizational learning demands that learning and change should be found in the organizational arena. When planning for staff development, it is crucial for school leaders to ensure focus is results-driven, standards based, and focused on the daily work of educators (Hirsh, 2004).

Effective school leaders first focus on working collaboratively with their staff to build consensus on the specific staff development needs while clearly maintaining the focus on student achievement. "An effective school leader ensures that change efforts are aimed at clear, concrete goals" (Marzano, Waters, & McNulty, 2005, p. 50). Working collaboratively with staff works to engage them and helps to build consensus on the staff development decisions to be made. Baron (2008) emphasizes the importance of faculty ownership of decisions before they are asked to agree to it, and Schlechty (2002) maintains that strong support is essential to support and maintain a collegial environment. Schechty says that principals must demonstrate their ability to work with the teachers rather than work on them. The process of building consensus includes giving faculty members ample opportunity to voice opinions and concerns. Baron (2008) says that after staff concerns and questions have been addressed in open forum, facilitators can move to call for consensus and affirmation of decisions. After consensus has been reached with the faculty, it is the duty of the school leaders to make necessary resource allocations to support the staff development implementation (Baron, 2008).

Resource Management

ISLLC Standard 3 states, "An educational leader promotes the success of every student by ensuring management of the organization, operations, and resources for a safe, efficient, and effective learning environment" (CCSSO, 2008, p. 14). One function of ISLLC Standard 3 says that effective leaders develop distributed leadership capacity on their campuses. School leaders can effectively multiply their leadership in staff development by growing teacher leaders on the campus. Leaders can start building leadership capacity by modeling collegiality with the staff. It is the responsibility of the campus administrator to model how a leader thinks and approaches problems (Schlechty, 2002).

> "To be a leader, a teacher must think as leaders do. Rather than asking, "What am I going to do?" leaders ask, "What is it that I am trying to get others to do?, and what reasons might they have for doing those things?" Leaders also ask questions like "How might I link what I want others to do to something those whom I want to follow me want, need, or value?" (Schlechty, 2002, p. 44)

Schlechty (2002) says that leaders need to share authority with their staff as opposed to delegating authority. Shared authority is communicated from the office of leadership and strengthens the relationships with staff members. Schlechty (2002) goes on to say that moral leadership, that which includes beliefs, values, and commitments, cannot be delegated, but it is leadership that can be shared. This type of shared leadership empowers staff and strengthens the relationships and consensus on a campus. Leadership should not only be shared with teachers, but it should also be shared with the

administrative team. Marzano (2005) offers several approaches to engage the leadership team in hands-on instructional leadership. Marzano (2005) says that members of the campus leadership team should be responsible for reading and staying current with educational research but each member for a different topic. Doing this creates expert team members that are able to share collectively when the team meets to plan staff development or solve a critical problem.

Another function of ISLLC Standard 3 is to "ensure that teacher and organizational time is focused to support quality instruction and student learning" (CCSSO, 2008, p. 14). According to Darling-Hammond (1999), "the master schedule must change before schools are able to sustain continual teaching and learning of staff and students" (p. 32). She concludes that professional development will only be successful and ongoing if the time in school is structured for that specific purpose. She suggests longer blocks of learning time and reduced teacher isolation, through common planning periods, as purposeful time managing strategies. Guskey (2009) agrees and states "Effective professional learning time must be well organized, carefully structured, clearly focused, and purposefully directed", and "obviously educators need time to deepen their understanding, analyze students' work, and develop new approaches to instruction" (p. 230). Schlechty (2002) advises that school leaders need to complete a detailed study on how they use their time. The school leader must look back over the past months and determine how much time they spend on activities and how they relate, directly or indirectly, to improving instruction and student achievement. After the leader performs a time evaluation, it is important for them to increase activities associated with

improvement and decrease activities with no association to instruction or student achievement. Schlechty (2002) also says it is crucial for the school leader to nourish interests and needs of the teachers, and this can be accomplished through books, articles, and other materials. Marzano (2005) notes the high correlation of providing teachers with meaningful resources with student achievement, and he states that principals demonstrate the responsibility of resources when he meets with teachers to find out what materials they need to be successful in the classroom.

Community Relations

ISLLC Standard 4 states, "An educational leader promotes the success of every student by collaborating with faculty and community members, responding to diverse community interests and needs, and mobilizing community resources" (p.15). Functions of Standard 4 charge school leaders to build sustainable relationships with the outside community and use all available data to facilitate and meet the needs of the community's cultural needs (CCSSO, 2008). To be successful, parents must be given access to the necessary data and information that is relevant to their child's education, but school leaders often neglect to share this information. Taveras, Douwes, and Johnson (2010) make the case that school leaders are responsible for working with parents and community members to help understand individual and group achievement data. They conclude, "As using data to improve student achievement becomes an increasingly important aspect of education reform, it is critical that parents become integral partners in this process. Put differently, a commitment to parent involvement must extend over time

not as a one-stop workshop, but as a concrete multi-party effort over the course of years"

(Taveras, Douwes, & Johnson, 2010, p. 11)

Ethics

ISLLC Standard 5 states, "An educational leader promotes the success of every

student by acting with integrity, fairness, and in an ethical manner. Functions of standard

5 include (a) ensure a system of accountability for every student's academic and social

success; (b) model principles of self-awareness, reflective practice, transparency, and

ethical behavior; (c) safeguard the values of democracy, equity, and diversity; (d)

consider and evaluate the potential moral and legal consequences of decision-making;

and (e) promote social justice and ensure that individual student needs inform all aspects

of schooling" (CCSSO, 2008, p. 15).

      a. ISLLC Standard 5 strongly relates to one of Marzano's (2005)

         leadership responsibilities:

            i. Ideals/Beliefs (.22) – communicates and operates from strong

               ideals and beliefs about schooling

Advocate

ISLLC Standard 6 states, "An educational leader promotes the success of every

student by understanding, responding to, and influencing the political, social, economic,

legal, and cultural context. Functions of standard 6 include (a) advocate for children,

families, and caregivers; (b) act to influence local, district, state, and national decisions

affecting student learning; and (c) assess, analyze, and anticipate emerging trends and

initiatives in order to adapt leadership strategies" (CCSSO, 2008, p. 15).

a. ISLLC Standard 6 strongly relates to two of Marzano's (2005)

leadership responsibilities:

    i. Outreach (.27) - is an advocate and spokesman for the school to

    all stakeholders

    ii. Flexibility (.28) - adapts leadership behavior to current needs

    and is comfortable with dissent

Achievement Gap

Student achievement and success of all students is a priority responsibility for the

people, educators, and policymakers of the United States. The U.S. Department of

Education defines Achievement Gap as "the difference between how well low-income

and minority children perform on standardized tests as compared with their peers" (U.S.

Department of Education, n.d.). Policy makers addressing inequities found in public

education can be traced to Brown vs. Board of Education when the segregation of schools

was declared unconstitutional (United States Courts, n.d.). Coleman (1968) wrote about

the concepts of equality in education. He discovered significant gaps in the learning

between children of different races, language, and economic situations. From his work,

Coleman concluded that "the student's family background was the overall predictor to

students' success in any educational institution." Coleman also determined that

"students' influence on one another was substantial" (Rojas-LeBouef & Slate, 2012, p.

2).

In 2001, the No Child Left Behind Act was instituted to "close the achievement

gap with accountability, flexibility, and choice so that no child is left behind" (H.R. Res.

107-110, 2001, p. 1). Programs including Reading First and School Dropout Prevention Initiative, and various state and local programs have been implemented in an effort to support the education of our nation's students that have grown up disadvantaged. Advancement Via Individual Determination (AVID) was founded in 1980 by Mary Catherine Swanson. AVID is a non-profit organization with the goal of closing the achievement gap between populations of students and to prepare students for college. In 2015, AVID serves more than 800,000 students in 44 states and 16 different countries. AVID is designed to train educators to use research based strategies to help prepare students for success in high school and higher education. Districts that incorporate AVID have the option to incorporate the program in elementary, junior high, and high school. In AVID's 2014 research overview, student success in the program in supported by data. Key findings for students include: AVID students outperform peers on state-mandated tests and standardized tests, time spent in AVID elective classes makes a difference, socio-economic status doesn't matter if students remain in AVID, and student's attendance rates increase and even outperform peer averages. The 2014 research report also included key findings for teachers which include: AVID professional development makes a difference for AVID elective class teachers, ongoing professional development is key to AVID's school-wide success, teachers need at least two extra trainings from their district coordinator, campus-based AVID coordinators should be equipped with solid teaching practice, and principals are key to AVID implementation and they should include AVID elective teachers as campus leaders (AVID Center, 2014).

Although funding has been provided and research has been conducted, evidence of achievement gaps persist in America's schools (Rojas-LeBouef & Slate, 2012). Haycock and Jerald (2002) detail that gaps in achievement are evident at the elementary level. For example, nearly two thirds of Hispanic and Black student achieve below the minimum reading level by the fourth grade while only 25% of White students perform lower than the minimum achievement level. Math statistics demonstrate that approximately 50% of Hispanic and 33% of Black students fall below the minimum achievement level. Alvarez and Bali (2004) studied the race gap in student achievement and discovered achievement gaps between Black, White, and Hispanic students as early as first grade. Their research also provided evidence that the achievement gap expanded between elementary and secondary levels of education (Bali & Alvarez, 2004). Anderson (2010) says that research has focused on four groups of factors and the achievement gap. Described groups include: (a) student characteristics, (b) family characteristics, (c) school based characteristics, and (d) socio-cultural factors.

In the "Gaps in Access and Persistence Study," conducted by the National Center for Educational Statistics (2012), wide gaps in student performance were recorded on the SAT and ACT. Indicator 24, which focuses on SAT and ACT student performance, demonstrated achievement gaps in the performance between racial and ethnic groups. ACT math data indicated that: Asian students met standards at 71%, White's at 54%, Hispanic's at 30%, and Black students met standard at 14%. ACT science data indicated that: Asian students met standards at 46%, White's at 37%, Hispanic's at 15%, and Black students met standard at 6%. ACT English and reading data indicated that: Asian

students met standard at 76%, White's at 77%, Hispanic's at 47%, and Black students met standard at 35%. SAT scores also indicated significant gaps in student achievement between ethnic and racial groups. SAT critical reading scores indicated that: Asian students average score was 517, White's averaged 525, Hispanics averaged 451, and Black students averaged 428. Average SAT math scores demonstrated that: Asians students averaged 595, White's averaged 535, Hispanic's averaged 463, and Black students averaged 427. Writing scores on the SAT demonstrated that: Asian students averaged 528, White's averaged 516, Hispanic's averaged 444, and Black students averaged 417 (Ross et al., 2012).

Haycock and Jerald (2002) describe four strategies that principals can implement to close the achievement gaps on their campuses.

1) Take responsibility for closing achievement gaps.

2) Use standards to reshape curriculum and instruction.

3) Find ways to find extra instruction for students that need it.

4) Assign the strongest teachers to students that need them most.

In taking responsibility for closing achievement gaps, Haycock and Jerald (2002) suggests that principals share data about opportunities afforded to disadvantaged students. She says that principals need to ensure that disadvantaged students get high quality teachers and are challenged with rigorous curriculum. Rojas-LeBouef and Slate (2012) add that research indicates positive correlation between high qualified teachers and closing the gap, especially when the students come from low socio-economic conditions. Principals also have the responsibility to ensure that teachers have the

necessary resources and support to align instruction with rigorous standards. Leithwood (2010), in his study entitled "Characteristics of School Districts that Are Exceptionally Effective in Closing the Achievement Gap," supports the findings and contributes that districts and principals must work to establish student achievement standards, adopt district-wide curricula with a strong instructional model, and align all of the elements of the technical core. Once student performance standards and curriculum alignment have been addressed, it is the responsibility to the principal to lead teachers through using data to identify students that need intervention. Students underperforming must be met with additional intensive instruction in the areas of weakness. The best teachers must be allocated to work with the struggling students (Haycock & Jerald, 2002).

SAT and ACT

According to the National Association of College Admission Counseling (NACAC) report (2008), "State of College Admissions 2012," SAT and ACT remains a critical component for college admissions. Approximately 60% of colleges reported SAT and ACT to be of considerable importance, and 30% rated SAT and ACT to be of moderate importance in the admission of students. Other factors that colleges reported to be of significance in admissions include scores in college preparatory classes 84%, strength of curriculum 68%, and grades in all courses 52%.

The NACAC (2008) report, "Report of the Commission on the Use of Standardized Tests in Undergraduate Admission," issued five recommendations including:

- routinely assessing implications of standardized test requirements;

- accounting for disparities among students with differential access to information about admission testing and preparation;

- communicating possible misuses of admission test scores;

- creating educational opportunities for colleges, high schools, and college admission counselors on the topic of appropriate use of standardized test scores; and

- recognizing differences in test scores among different groups of people, and continually assess the use of standardized test scores.

The recommendations by the NACAC (2008) have significant implications for school leaders. Recommendation number two signifies that school leaders must be aware and confront the potential inequities of test preparation amongst their student populations, but the environment offers difficult challenges. Buchmann, Condron, and Roscigno (2010) describe the competitive environment in which students operate and compete for the opportunity to attend their college of choice. They note that SAT performance plays an important part of student admission, and college test preparation in the United States may rely on the students' economic situation and parent level of education. For example, Buchmann el al. (2010) found that "family income significantly boosts the odds of using the two most expensive types of test preparation – private courses and private tutors – compared to using no prep" (p. 447).

Evidence supports that college entrance exam scores are becoming increasingly more important to students because they impact college admission, financial aid, and prestige for their attended high school (Moss, Chippendale, Mershon, & Carney, 2012).

"It makes sense that in such a competitive environment, students and parents will take action to enhance the chances of admission, and achieving a high SAT score is very much a part of that equation" (Buchmann, Condron, & Roscigno, 2010, p. 438). Literature is demonstrating that schools across the nation are taking advantage of college entrance exam preparation to increase their students scoring. It is important that districts and campuses take a leadership role in developing partnerships with test-preparations businesses to ensure that the characteristically large gaps between the students of various backgrounds are diminished. One study indicates that the difference between students not participating in test preparation and students engaging in SAT preparation averaged between 26 and 37 points. This number is significant and is noted by the National Association of College Admission Counseling to drastically improve students' chances of admission into their college of choice (Buchmann et al., 2010). Schools and researchers around the nation are studying and working to improve the relationships between campuses and test-preparation organizations. Studies are demonstrating that test-preparation does positively impact scoring on college entrance exams. Schools that offer on-campus programs are improving access to students who would not traditionally participate in test-preparation activities. Eric J. Seymour, principal of Vero Beach High School in Florida, initiated a school based program that offered on-line test-preparation to all of its 2800 students. He has indicated that the program has been very successful in doubling the all-time school number of National Merit Scholars from four to eight (Seymour, 2010).

SAT.

According to the College Board's (2012) *SAT Report on College and Career Readiness: 2012*, the SAT was first administered in 1926 in an effort to provide fair access to college for all students. Modern SAT examinations are designed with input from educators and covers core content areas that are indicated as important for student success in college. Areas tested on today's SAT include critical reading, math, and writing, and they are described as:

- a reading section which assesses students' ability to inferences, synthesize, distinguish ideas and understand vocabulary in context;

- a mathematics section which requires students to apply mathematical concepts, solve problems, and interpreting tables, charts, and graphs; and

- a writing section which requires students to communicate ideas, revise and edit; identify sentence-level errors; understand grammatical structures; and improve coherence of ideas (CollegeBoard, 2012).

The College Board provides subject area level indicators in the three areas of critical reading, mathematics, and writing, Data collected on students that took Advanced Placement classes demonstrated that 71 percent of students taking AP or Honors English courses met the SAT subject-level college readiness indicator while only 38 percent of students met the standard without taking the advanced courses. Mathematics data also demonstrated a significant gap between students taking AP and Honors math courses versus students that did not. 83 percent of students taking mathematics AP and Honors courses met the SAT subject-level college readiness indicator while only 44 percent of

students met the standard without taking the advanced mathematics courses. Writing scores followed suit with 66 percent of students taking AP and Honors courses meeting the SAT subject-level college readiness indicator while only 35 percent of students met the standard without taking the advanced English courses (CollegeBoard, 2012).

In addition to measuring student capabilities in reading, math, and writing, the SAT also measures college readiness by assessing student reasoning and problem solving (CollegeBoard, 2012).

"The SAT Benchmark was designed to measure college readiness of groups of students. The SAT Benchmark score of 1550 is associated with a 65 percent probability of obtaining a first year GPA (FYGPA) of a B- or higher, which in turn is associated with a high likelihood of college success. Students meeting the benchmark score of 1550 were more likely to enroll in a four-year college, had higher first-year GPAs and were more likely to be retained for their second and third year than those students who did not attain the SAT benchmark. The SAT Benchmark can assist secondary school administrators, educators and policymakers in evaluating the effectiveness of academic programs in order to better prepare students for success in college. The SAT Benchmark is designed for groups of students and should not be used for high-stakes decisions regarding the college readiness of any individual student. As college readiness depends on a number of factors, meeting or not meeting this benchmark does not guarantee success or failure in postsecondary education for any individual student. The benchmark should never be used to discourage students from pursuing

postsecondary education. Many factors contribute to college readiness. A student is considered college ready when he or she has the knowledge, skills, and behaviors to successfully complete a college course of study. Because college readiness and completion is dependent on many academic and non-academic factors, students who score below the SAT Benchmark can still succeed in college. The College Board continues to advise, for individual high-stakes decisions such as admission, SAT scores should always be used together with high school grades and other factors" (CollegeBoard, 2012, p. 21, 22).

The 2012 SAT Report on College and Career Readiness, which included participants from more than 100 colleges and universities, states that 43 percent of students performed at or above the SAT benchmark level. Other data presented in the report demonstrated that 49 percent of students that performed at or above the SAT Benchmark had completed Core Curriculum while 30 percent had not completed Core Curriculum. Parental education also indicated to be a significant factor with 60 percent of students performing at or above the SAT benchmark having parents with at least a bachelor's degree while 27 percent had parents with less than a bachelor's degree (CollegeBoard, 2012).

The 2012 SAT Report on College and Career Readiness states that approximately 1.7 million students from the class of 2012 took the SAT. "The mean scores for the SAT class of 2012 were 496 in critical reading, 514 in mathematics and 488 in writing. Since 2008, SAT participation has increased 6 percent, while critical reading scores have declined four points, writing scores have declined five points, and mathematics scores have remained stable" (CollegeBoard, 2012, p. 27). College Board compared scores

from students who reported completing a core curriculum versus students that did not complete a core curriculum. 75 percent of all SAT takers from the class of 2012 reported completing a core curriculum. Data demonstrated that students from the class of 2012 which completed a core curriculum had an average SAT score of 1550. Students that took the SAT and reported not completing a core curriculum had an average SAT score of 1406. Data were similar between students from public and private schools. Public school students that reported completing a core curriculum scored 149 points higher than students that did not complete a core curriculum. Students from the 2012 "all schools" group, which included public and private schools together, scored 144 points higher if they reported completing a core curriculum versus students that reported not completing a core curriculum (CollegeBoard, 2012).

The College Board (2012) found distinct differences in core curriculum completion among different groups based on racial, educational, and economic conditions. College Board (2012) states that students who completing a core curriculum demonstrate better performance on the SAT, but differences are noted, between student populations, in the rate of student completion of core curriculums.

> "This is a critical issue for American educators, as academic preparedness for college is strongly linked to the type and rigor of courses that a student takes in high school. Providing a rigorous learning platform that prepares all of our nation's students to perform in the classroom is crucial to our nation's future prosperity" (CollegeBoard, 2012, p. 29).

Data in the 2012 SAT Report on College and Career Readiness indicate that rates of core curriculum completion vary by as much as 15 percent between racial groups with White completing at 80 percent, Asian 73 percent, Other 72 percent, American Indian 71 percent, Hispanic 69 percent, and African American students at 65 percent. Parental education impacted student completion of core curriculum by as much as 18 percent. 81 percent of students with parents with Graduate degrees completed a core curriculum compared to 78 percent with Bachelor's degrees, 73 percent with Associate's degrees, 70 percent with High School Diplomas, and 63 percent if the parent had less than a High School Diploma. Family income also impacted the student completion of core curriculum with 84 percent completion if income was greater than 200,000, 81 percent with incomes between 160,000 and 200,000, 80 percent with incomes between 120,000 and 160,000, 78 percent with incomes between 80,000 and 120,000, 74 percent with incomes between 40,000 and 80,000, 70 percent with incomes between 20,000 and 40,000, and 65 percent if family income was below 20,000 (CollegeBoard, 2012).

In 2012, four percent of SAT testers scored between 2100 and 2400 while two percent of testers scored between 600 and 890. In studying completion of a core curriculum, College Board found that students who reported achieving an "A" GPA produced higher SAT scores that did the peers. Of the students that scored between 2100 and 2400 on the SAT, 93 percent reported an overall "A" GPA while twelve percent of students reporting an "A" GPA scored between 600 and 890. Significant differences were also evident between SAT scores of students who completed four years of coursework in a subject versus students that did not complete four years of coursework in

a subject. Of the students that scored between 2100 and 2400 on the SAT, 93 percent completed four years of coursework in English, 93 percent completed four years of coursework in Math, 85 percent completed four years of Natural Science, and 75 percent completed four years of Social Sciences (CollegeBoard, 2012).

Students completing Advanced Placement Program (AP) and Honors courses demonstrated significantly higher scores than their peers that did not. Students that took AP or Honors mathematics courses outperformed their peer's SAT scores by 294 points. Students that took AP or Honors English courses outperformed their peer's SAT scores by 251 points, and students that took AP or Honors Natural Science courses outperformed their peer's SAT scores by 284 points (CollegeBoard, 2012). College Board (2012) research demonstrates that students who score a 3 or higher (out of 5) on AP exams have greater achievement in college, and they are also found to have higher graduation rates than their non-AP peers. AP courses make a profound impact minority and low-income students. Specifically, the National Center for Educational Accountability found that underserved students who took AP courses, and scored 3 or higher, were more likely to graduate from college. Although progress has been made, minority and low-income students continue to participate in AP courses at a lower rate than their peers (CollegeBoard, 2012).

Minority students participate in AP courses at lower rates across each subject area. In a survey of SAT test takers in 2012, 47 percent of Asian students, 40 percent of White students, 31 percent of Hispanic students, 31 percent of American Indian students, and 25 percent of African American students participated in AP or Honors Math. 44 percent of

Asian students, 46 percent of White students, 39 percent of Hispanic students, 40 percent

of American Indian students, and 34 percent of African American students participated in

AP or Honors English. Natural Science participation saw similar results. 43 percent of

Asian students, 38 percent of White students, 28 percent of Hispanic students, 28 percent

of American Indian students, and 24 percent of African American students participated in

AP or Honors Science (CollegeBoard, 2012).

ACT.

The ACT exam consists of four multiple-choice tests which include: English,

Mathematics, Reading, and Science. The ACT Plus Writing includes the four multiple-

choice tests and as well as a writing section (The ACT website, 2013). The ACT tests are

described as:

- an English section with 75 multiple-choice questions completed in 45

  minutes;

- a mathematics section with 60 multiple-choice questions completed in 60

  minutes;

- a reading section with 40 questions completed in 35 minutes;

- a science section with 40 questions completed in 35 minutes; and

- an optional writing test with one writing prompt to be completed in 30

  minutes (The ACT website, 2013).

ACT has been collecting data and reporting on students' academic readiness for

college since 1959. In its Condition of College and Career Readiness report, ACT

defines college and career readiness as "the acquisition of the knowledge and skills and

student needs to enroll and succeed in credit-bearing first-year courses at a postsecondary institution (such as a 2 or 4-year college, trade school, or technical school) without the need for remediation" (ACT, 2012, p. 4). ACT's College Readiness Benchmarks represent the minimum scores needed on the ACT subject area tests to indicate the chance that students will have to make a B or C in the corresponding first year college courses. (ACT, 2012).

ACT (2012) found approximately 52 percent of all 2012 high school graduates in the United States took the ACT during high school. From school years 2008 to 2012, the ACT participation increased by approximately 17 percent. Student performance on the ACT (2012) demonstrated that:

- 67 percent of ACT-tested high school graduates met the English College Readiness Benchmark;

- 52 percent of ACT-tested high school graduates met the Reading College Readiness Benchmark;

- 46 percent of ACT-tested high school graduates met the Mathematics College Readiness Benchmark;

- 31 percent of ACT-tested high school graduates met the Science College Readiness Benchmark; and

- 25 percent of ACT-tested high school graduates met all four subject area College Readiness Benchmarks (ACT, 2012).

ACT student performance between 2008 and 2012 demonstrated that percentages of students meeting the benchmark on the English test dropped from 68 percent to 67

percent. Performance on the Reading test dropped from 53 to 52 percent. Performance on the Mathematics test improved from 43 to 46 percent. Performance on the Science test improved from 28 to 31 percent, and percentage of students meeting the benchmark on all four tests improved from 22 to 25 percent (ACT, 2012).

Significant performance gaps on the ACT are demonstrated between ethnicity groups. Data presented for 2012 graduates includes English, reading, math, and science scores.

- ACT English scores indicate white students met the ACT English benchmark at 77 percent, Asians 76 percent, Pacific Islander 57 percent, Hispanic 49 percent, American Indian 44 percent, and African Americans 36 percent.

- ACT reading scores indicate White students met the ACT Reading benchmark at 62 percent, Asians 62 percent, Pacific Islander 42 percent, Hispanic 36 percent, American Indian 35 percent, and African Americans 22 percent.

- ACT mathematics scores indicate White students met the ACT Mathematics benchmark at 54 percent, Asians 72 percent, Pacific Islander 41 percent, Hispanic 31 percent, American Indian 24 percent, and African Americans 15 percent.

- ACT Science scores indicate White students met the ACT Science benchmark at 38 percent, Asians 47 percent, Pacific Islander 21

percent, Hispanic 16 percent, American Indian 15 percent, and

African Americans 15 percent.

- All Four Subject Tests indicate White students met all four test

  benchmarks at 32 percent, Asians 42 percent, Pacific Islander 17

  percent, Hispanic 13 percent, American Indian 11 percent, and

  African Americans 5 percent (ACT, 2012).

Gaps in access to taking the ACT are also evident. ACT (2012) found: (a) 59 percent of

all ACT-tested graduates were White, (b) 13 percent were African American, (c) 14

percent were Hispanic, (d) 4 percent were Asian, (e) 3 percent were two or more races,

(f) 1 percent were American Indian, (g) less than 1 percent were Pacific Islander, and (h)

5 percent were No Response.

ACT (2012) found that graduates, who took at least a core curriculum in high

school, were more likely to meet the corresponding ACT College Readiness Benchmark

in 2012 than their peers who did not take a core curriculum. The percentage of high

school graduates meeting the subject area benchmarks on the ACT was demonstrated to

have a direct correlation to the number of years of courses that students took during the

high school career.

- ACT English – 68 percent of students taking a core or more

  curriculum met the ACT English benchmark, but only 41

  percent that took less than a core curriculum met the

  benchmark.

- ACT Reading – 54 percent of students taking a core or more curriculum met the ACT Reading benchmark, but only 40 percent that took less than a core curriculum met the benchmark.

- ACT Mathematics – 48 percent of students taking a core or more curriculum met the ACT Mathematics benchmark, but only 8 percent that took less than a core curriculum met the benchmark.

- ACT Science – 33 percent of students taking a core or more curriculum met the ACT Science benchmark, but only 13 percent that took less than a core curriculum met the benchmark (ACT, 2012).

Chapter III

Methodology

This chapter includes subsections detailing research design, research questions, setting, participants, procedures, SAT and ACT data, interview questions as included in Appendix B, and limitations. The research design was selected because it allows for the use of archival data in the campus participant selection process, and it allows qualitative data, in the form of interviews, to provide deeper insight into the contributing factors of campus success. The purpose of this study is to identify administrative leadership practices that school leaders report to improve participation and performance on the SAT and ACT. The study also intended to identify leadership practices that school leaders report to close the gap between student groups in the area of participation and performance on the SAT and ACT. The intent of the study is to identify best practices reported by the studied high schools in an effort to improve participation and performance of all student groups on all high school campuses.

Research Design

This exploratory qualitative study identified research based leadership actions that contribute to high levels of student participation and student performance on the SAT and ACT. This study compared SAT and ACT data between identified high performing Texas high school campuses, campus groups as identified by Texas AEIS reports, college entrance exam reports, and state averages. High schools in this study were selected based on set criteria which include:

- the high school will outperform state averages in the categories of participation and performance on the SAT and ACT;

- the high school will outperform their campus group in the categories of participation and performance on the SAT and ACT;

- the high school student population will have 40 percent or greater economically disadvantaged students; and

- the high school student population will be ethnically diverse with 50 percent or greater being identified as Hispanic or African American.

Selected Texas high performing districts and campuses, as identified through Texas AEIS and College Entrance Exam reports, were contacted to participate in interviews that sought to identify correlated leadership actions associated with their identified strengths in the area of college entrance exam participation and performance. This study merged the archival data provided from the Texas AEIS and College Entrance Exam reports and qualitative data collected from interviews conducted with district administrators and campus leaders.

Research Questions

The following research questions are intended to guide the study.

1. What leadership actions do school leaders report to influence the participation and performance on the SAT and ACT?

2. What are the similarities and differences in reported leadership actions between the studied districts and high school campuses?

3. How do school leaders report their leadership actions to impact student participation and performance on the SAT and ACT?

4. How do school leaders report their leadership actions to impact closing the achievement gap on participation and performance on the SAT and ACT?

Setting

The setting for the study included selected independent school districts and high schools in Texas. Districts and high schools were selected through disaggregation of archival campus data from Texas Education Agency AEIS reports and College Entrance Examination reports from years 2010 and 2011. The campuses selected to participate in the study met criteria including: rates of participation on the SAT and ACT, performance on the SAT and ACT, socio-economic status, and ethnic diversity as outlined in the research design.

Participants in the study included campus administrators, campus staff, and district personnel that play roles or make decisions regarding SAT and ACT implementation policies. Campuses selected to participate have SAT and ACT participation and performance averages that exceed state averages. The campuses have an economically disadvantaged population that meets or exceeds 40 percent, and at least 50 percent of total students on the campus must be identified as Hispanic or African American. Graduating class numbers reflect the number of total graduates minus the number of special education graduates from that year. These parameters set forth by the study will help to align the selected campuses with populations that are similar to state demographic averages.

Independent School District A has two high schools that fit the description needed in this study. High School A, in 2010, had a graduating class of 390 students. Total student population percentages include: 38.2 percent White, 11.3 percent Black, 34.5 percent Hispanic, 13.7 percent Asian, and 39.9 percent economically disadvantaged. High School A students outperformed state averages in the categories of SAT and ACT participation and performance. SAT percent tested, in 2010, was 72.3 percent, and 34.8 percent of students met or exceeded the set state criteria. ACT percent tested, in 2010, was 35.1 percent, and 33.6 percent of students met or exceeded the set state criteria. (Texas Education Agency [TEA], 2011)

High School A, in 2011, had a graduating class of 418 students. Total student population percentages include: 36 percent White, 11.8 percent Black, 36.9 percent Hispanic, 13.2 percent Asian, and 40.4 percent economically disadvantaged. High School A students outperformed state averages in the categories of SAT and ACT participation and performance with the exception of ACT participation rate. SAT percent tested, in 2011, was 76.6 percent, and 35.3 percent of students met or exceeded the set state criteria. ACT percent tested, in 2011, was 30.4 percent, and 44.9 percent of students met or exceeded the set state criteria. (Texas Education Agency [TEA], 2012)

High school C, also in Independent School District A, meets the criteria for the study. High school C, in 2010, had a graduating class of 345 students. Total student population percentages include: 26.5 percent White, 19.5 percent Black, 44.3 percent Hispanic, 8.5 percent Asian, and 52 percent economically disadvantaged. High School C students outperformed state averages in the categories of SAT and ACT participation and

performance. SAT percent tested, in 2010, was 64.3 percent, and 36.5 percent of students met or exceeded the set state criteria. ACT percent tested, in 2010, was 36.5 percent, and 34.1 percent of students met or exceeded the set state criteria. (TEA, 2011)

High School C, in 2011, had a graduating class of 370 students. Total student population percentages include: 24.2 percent White, 21.8 percent Black, 44.8 percent Hispanic, 7.5 percent Asian, and 56.5 percent economically disadvantaged. High School C students outperformed state averages in the categories of SAT and ACT participation and performance with the exception of ACT participation rate. SAT percent tested, in 2011, was 64.9 percent, and 30 percent of students met or exceeded the set state criteria. ACT percent tested, in 2011, was 30.8 percent, and 38.6 percent of students met or exceeded the set state criteria. (TEA, 2012)

Independent School District B has two high schools that fit the description needed in this study. High School B, in 2010, had a graduating class of 428 students. Total student population percentages include: 32.9 percent White, 35.2 percent Black, 25.9 percent Hispanic, 3.7 percent Asian, and 45.9 percent economically disadvantaged. High school B students outperformed state averages in the categories of SAT and ACT participation and performance. SAT percent tested, in 2010, was 65.4 percent, and 35 percent of students met or exceeded the set state criteria. ACT percent tested, in 2010, was 47.7 percent, and 39.7 percent of students met or exceeded the set state criteria. (TEA, 2011)

High school B, in 2011, had a graduating class of 380 students. Total student population percentages include: 33.2 percent White, 31.7 percent Black, 26.9 percent

Hispanic, 5.4 percent Asian, and 44.9 percent economically disadvantaged. High School B students outperformed state averages in the categories of SAT and ACT participation and performance. SAT percent tested, in 2011, was 75.3 percent, and 37.1 percent of students met or exceeded the set state criteria. ACT percent tested, in 2011, was 45.5 percent, and 38.2 percent of students met or exceeded the set state criteria. (TEA, 2012)

High school D, also in Independent School District B, meets the criteria for the study. High school D, in 2010, had a graduating class of 422 students. Total student population percentages include: 32.3 percent White, 18.8 percent Black, 38.5 percent Hispanic, 6.8 percent Asian, and 47.5 percent economically disadvantaged. High school D students outperformed state averages in the categories of SAT and ACT participation and performance. SAT percent tested, in 2010, was 68.5 percent, and 36.7 percent of students met or exceeded the set state criteria. ACT percent tested, in 2010, was 44.1 percent, and 47.3 percent of students met or exceeded the set state criteria. (TEA, 2011)

High School D, in 2011, had a graduating class of 487 students. Total student population percentages include: 30.8 percent White, 19.4 percent Black, 39 percent Hispanic, 7.5 percent Asian, and 47.6 percent economically disadvantaged. High School D students outperformed state averages in the categories of SAT and ACT participation and performance. SAT percent tested, in 2011, was 71.3 percent, and 36 percent of students met or exceeded the set state criteria. ACT percent tested, in 2011, was 39 percent, and 34.2 percent of students met or exceeded the set state criteria. (TEA, 2012)

Procedures

This study used data from 2010 and 2011 Texas AEIS reports and College Entrance Exam reports to identify high schools that represent populations similar to average state demographic data. Demographic data studied for campus selection includes population percentages of: economically disadvantaged, White, Black, Hispanic, and Asian. The study also used campus data from the Texas AEIS report and College Entrance Exam report to identify campuses that outperform state averages and campus group averages in the categories of: SAT percent tested, SAT percent at/above state criteria, ACT percent tested, and ACT percent at/above state criteria. Districts and campuses selected to participate in the study were contacted, and district board policy was followed in applying for permission to study the selected campuses. All forms and applications for approval were submitted, and all information requested by the district was submitted in a timely manner. After receiving confirmation of approval to conduct the study, communication was established with district and campus personnel to allow for interviews to be conducted. Interview questions were developed. Scheduled interviews with campus and district personnel were conducted on the high school campuses and by means of electronic communications that included phone and email. Data collected from interviews was analyzed.

Instruments: SAT and ACT data

Archival data on student participation and performance was gathered from the Texas Educations Agency AEIS reports as well as specific College Entrance Exam reports detailing district and campus performance on the SAT and ACT. Data were

reviewed from the graduating classes of 2010 and 2011. Data retrieved from AEIS reports describe demographic populations on the campus as well as performance levels on the SAT and ACT. Demographic data from the AEIS report includes number of graduates, campus percentages of ethnic groups, and percentage of economically disadvantaged students. Data retrieved from TEA College Entrance Exam reports include number of students taking the SAT and ACT as well as number of students performing at or above the performance level criteria. Data from the AEIS reports and College Entrance Exam reports were reviewed in an effort to identify Texas public high schools that outperformed state averages and their campus group in the areas of participation and performance on the SAT and ACT.

Instruments: Interview Questions

Campus and district leaders, from identified high performing public high school campuses in Texas, were interviewed. Developed interview questions were aligned to answer the four research questions including:

1. What leadership actions do school leaders report to influence the participation and performance on the SAT and ACT?

2. What are the similarities and differences in reported leadership actions between the studied districts and high school campuses?

3. How do school leaders report their leadership actions to impact student participation and performance on the SAT and ACT?

4. How do school leaders report their leadership actions to impact closing the achievement gap on participation and performance on the SAT and ACT?

The interview questions were administered in effort to attain information about leadership actions that impacted student participation and performance on the SAT and ACT. The questions sought to engage leadership personnel at both the district and campus levels. Interview questions were directed to identify personnel that make an impact on these categories and the personnel's specific actions taken. Campus leaders were asked how the district supports their efforts. Campus leaders were also questioned about particular areas of actions including instruction, advanced classes, SAT/ACT preparation programs, and communication. Leaders were asked about how they communicate with students and parents about the SAT and ACT. Campus and district leaders were given the opportunity to speak openly about their beliefs and what they felt impacts student participation and performance on the SAT and ACT.

Assumptions and Limitations

    Assumptions.

        1. School leaders and staff complete interviews honestly.

        2. Data used in the study have not been fabricated.

    Limitations.

        1. Study will only include public Texas high school data.

        2. AEIS data will only reflect most recent data published.

        3. SAT and ACT data will only reflect most recent data published.

        4. Student populations studied, although similar, have natural differences in IQ and other impacting factors.

5. Differences in individual teacher effectiveness, although impactful on student achievement, will not be measured.

Chapter IV

Results

This chapter includes a description of selection process results as well as a description of the unique contributions that each district and campus made to the study. Similarities of interview responses between district and school leaders were identified, and analysis compared the identified leadership actions with The Council of Chief State School Officers (2008) ISLLC leadership standards and Marzano's (2005) leadership responsibilities. The intent of this study was to identify effective leadership practices, at both the campus and district level, that impact student participation and performance on the SAT and ACT. The study intended to identify and share best practices from the studied high schools in an effort to improve participation and scoring for all student on all high school campuses. Additionally, the study intended to identify leadership practices that school leaders report to close the gap between student groups in the area of participation and performance on the SAT and ACT. Campus and district personnel interviews were conducted in person and by phone. One district administrator responded to interview questions in written form through email. Interview questions were designed to answer the following research questions:

1. What leadership actions do school leaders report to influence the participation and performance on the SAT and ACT?

2. What are the similarities and differences in reported leadership actions between the studied districts and high school campuses?

3. How do school leaders report their leadership actions to impact student participation and performance on the SAT and ACT?

4. How do school leaders report their leadership actions to impact closing the achievement gap on participation and performance on the SAT and ACT?

Before describing the results of this study, it is noted that although district permission to study was obtained according policy, not all identified high school principals agreed to participate in the study. Each high school principal that did consent was interviewed face-to-face in a structured format in which all prepared interview questions were answered. These structured interviews lasted approximately one hour and also included impromptu questions and discussion between the researcher and interviewees. One campus principal invited his campus college and career facilitator to join the face-to-face interview, and she also responded to interview questions. Face-to-face interviews were recorded and transcribed. District personnel were unable to schedule times to participate in face-to-face interviews. One district administrator scheduled a phone interview in which he responded to prepared interview questioned as well as impromptu questions and discussion between the researcher and interviewee. The phone interview was recorded and transcribed. Another district administrator was unable to schedule a time to interview face-to-face or by phone, but she did agree to respond to interview questions in written format through email communication. The responses by email were not as comprehensive as others that were gathered through face-to-face or phone interview. As previously mentioned in the limitations of the study, interviewees may not have responded fully and honestly.

Independent School District A

Independent School District A was established in 1903. As of 2015, the district operates in the community of a large Texas suburb with a land mass of approximately 50 square miles. In 2015, more than 26,000 student are educated in the district's five high schools, six middle schools, and thirty elementary schools. The district's vision states that all students will meet or exceed the state's testing standards and graduate ready for college or the workforce without remediation, and the mission statement says it will work with the community to produce individuals that are responsible, life-long learners, complex thinkers and effective communicators. The district's primary goal is high achievement for all students, and its objectives include: improvement of instruction, improvement of the learning environment, improvement of operations, and improvement of community support. District awards and distinctions include: a graduation rate of 93% which beats the Texas state graduation rate of 88%, scholarships of more than 24 million dollars for the students that graduated from the district in 2014, and a GT program that is recognized as one of the best in Texas.

Particularly important to this study is the Advanced Academic Services department in the district. The department is led by an executive director with the support of a department manager, a secretary for records and specialists, and a Gifted and Talented clerk. The department is also staffed by five advanced academic specialists that are assigned to support specific campuses. The department's mission is to design a quality education for all students and support the unique needs of gifted learners, and the department's vision is to ensure that all identified gifted and talented students will work

with other gifted students on a daily basis, use rigorous curriculum, and meet advanced performance standards. The department supports a number of programs that include: Duke talent identification, advanced placement (AP) courses, gifted and talented (GT) programs and curriculum, and SAT/ACT preparation. In addition to a strong Advanced Academic Services department, the district also has an active Advancement Via Individual Determination (AVID) department. The department is led by a district director and supported by and AVID facilitator, AVID secretary and campus coordinators at each high school and middle school.

One district administrator, the Executive Director of Advanced Academic Services, agreed to answer questions regarding their role in student participation and performance on the SAT and ACT. The first research question of this study asked, "What leadership actions do school leaders report to influence the participation and performance on the SAT and ACT?" The third research question of this study asked, "How do school leaders report their leadership actions to impact student participation and performance on the SAT and ACT?" The Executive Director of Advanced Academic services was asked to reply to five questions that link to the first and third research question. The five interview questions included:

1) What do you do that impacts student participation and performance on the SAT and ACT?

2) What programs/preparation courses are in place to improve the performance on the SAT and ACT?

3) How does the district communicate with students and parents about the SAT and ACT?

4) What is done to increase the number of students taking advanced classes in your district?

5) What goals does the district have regarding SAT and ACT participation and performance?

Student participation and performance on the SAT and ACT is a direct district responsibility for the Executive Director of Advanced Academic Services. In her role this administrator, in coordination with campus administrators, helps implement a program in which each high school campus offers after school SAT and ACT preparation programs for its students. The school district funds half of the preparation program while the student is responsible for the remaining half of the program fee. Each high school campus in the district offers these partially funded preparation programs at least once each semester. To improve performance on the SAT and ACT, the executive director works with district academic content area directors to embed SAT and ACT into the curriculum. Additionally, high priority is put on Advanced Placement (AP) course participation. To identify potential AP course students, the district employs AP Potential. According College Board, AP Potential is a web-based research-driven tool allows districts to: identify students likely to succeed on AP exams, improve access to advanced courses, analyze data, and assist campuses in determining which AP courses to offer (College Board, 2015).

This study found that the district administrator implements communication tools to inform students, parents, and the community. College 101 presentations are offered to students and parents in the district. The presentations are offered in the evening hours to allow for maximum participation. Information presented in College 101 includes: Advanced Placement (AP) course introduction, International Baccalaureate (IB) program introduction, data depicting the benefits of taking AP courses, AP scoring rubrics, AP course and exam costs compared to actual universities, data comparing students taking AP courses vs. students not taking AP courses, learning benefits of taking AP courses, and myths vs. realities of AP coursework. In addition to College 101 presentations, the district employs counselors and outside consultants to inform students and parents on the topics of PSAT, SAT, and ACT.

The fourth research question of this study asked, "How do school leaders report their leadership actions impact closing the achievement gap on participation and performance on the SAT and ACT?" The Executive Director of Advanced Academic Services was asked to reply to two questions that link to this fourth research question. The two interview questions linked to the fourth research question included:

1) What actions have been taken to close the gap in student SAT/ACT participation and performance?

2) How does Advancement Via Individual Determination (AVID) impact student SAT/ACT participation and performance?

The executive director once again indicated that the district funds half of the SAT and ACT preparation programs that each high school campus facilitates at least once per

semester. She noted that the program is available to all high school students in the district. The district administrator indicated that she had no direct data or information about the link between the district and campus's AVID program.

High School A, Independent School District A

High School A was founded in 1988. It is a Title 1 campus located in a large suburban community in an independent school district that support a total of five high schools and a total district enrollment of more than 26,000 students in 2015. The mission of High School A supports a creative, challenging and caring environment that will, in four years, graduate all students as prepared to pursue college and become productive citizens. The campus supports the district goal of high achievement for all students. The campus highly values service, pride, citizenship and responsibility and works to demonstrate these values through campus organizations and service projects. Campus distinctions and accomplishments include: more than 100 students qualified as AP scholars with Distinction and Honors, a state-ranked Academic Decathlon team, and an Advancement Via Individual Determination (AVID) program that directly supports nearly 100 students on campus.

The high school principal agreed to meet for a face-to-face interview lasting approximately one hour. Interview questions were designed to answer the four primary research questions of this study. The first eighteen prepared interview questions focus on the principal's role and perceptions of their leadership impact on impacting student participation and performance on the SAT and ACT. The last two prepared interview questions focus on the principal's role and perceptions of their leadership impact to close

the achievement gap between student populations on the SAT and ACT. Some discussion and impromptu questions did occur during the one hour face-to-face interview, and those will also be shared in this section.

Leadership Actions.

The first two interview questions focused on the principal's direct actions that he believes impact SAT and ACT participation and performance on his campus. The principal emphasized that he runs a marketing campaign, in which he uses Twitter, announcements and posters around campus, to promote and celebrate student success. He implements this type of marketing for Advanced Placement (AP) classes, PSAT, SAT and ACT. The principal spoke of the culture at the campus that sets the expectation for students to take AP classes and the corresponding exam. To improve performance, teachers on this high school campus incorporate curriculum that helps students prepare for the PSAT, and the principal believes that the buildup to the PSAT leads to more success on the SAT and ACT. The campus, in collaboration with the district, also celebrates the superintendent's top 100 scholars based on scores from the PSAT. The district hosts a celebration for the top 100 scholars, and the principal believes that this gives students recognition and momentum to go be successful on the SAT and ACT.

External Factors.

The next two interview questions focused on the principal's perception of external factors that he believes makes his campus successful on the SAT and ACT. The principal spoke of the former principal, who has now moved on to district leadership, and the structures and expectations that she established on the campus. He also spoke of the

expectation from district leadership, including the department of Advanced Academics, for the campus and students to be high achievers. This campus also has a strong rivalry with another district high school in athletics and academics. The principal takes pride in being competitive and having his students be high achievers in everything including SAT and ACT. Although the campus is 44 percent economically disadvantaged, the principal believes that the community and parents have a high expectation for the students to be successful and attend college. The campus supports a K-16 mentality as opposed to a K-12 mentality, and that supports success. The district and campus also have a strong Advancement Via Individual Determination (AVID) program. At this campus, the principal believes that AVID supports students whose parents have never gone to college. It supports students to take advanced courses, provides them with tutors, prepares them for college and pushes them into college.

Campus Focus.

This section will focus on interview questions that asked the principal about: campus personnel, classroom instruction, advanced coursework, culture, funding and goals related to participation and performance on the SAT and ACT. Key personnel that work to promote success on campus include the associate principal and counseling staff. The principal tasks the associate principal with ensuring that the goal of high achievement is met. The associate principal sets up meetings with all classes to talk about advanced courses and also works with the counseling staff to register students individually. The associate principal directly supervises the counseling staff. Teachers

of advanced courses work to build the culture of high level academics, and the entire teaching staff is supported by lead teachers and instructional facilitators.

Instructionally, the campus incorporates daily learning targets that communicate to students what they are expected to know and learn in each class. The principal leads the administrative team to perform instructional rounds which is a process that he learned at Harvard University. Instructional rounds are used to gather data and generate discussion on what was seen in the classroom and how to make improvements. The principal incorporates a process from Great Schools that he described as a problem or a practice. The principal leads his staff through this process to seek improvement. This campus has focused, in the last five years, primarily on building a culture of discourse that is both oral and written. Teachers are focused on getting students to speak and write in the classroom. To increase the number of students taking advanced classes, the principal looks at data to identify students that who are capable of taking those courses. Once students are identified, they are encouraged to take the advanced courses and also supported by the campus AVID program. The campus offers dual credit options in a partnership with the local community college and they are working to form a leadership academy where high school students could potentially earn 24 college credit before graduation. The elimination of Pre-AP English classes in eleventh and twelfth grade also encourages more students to take AP classes.

According to the principal, the number one goal is high achievement for all students with a supporting goal of continuous improvement. He is constantly using data to find out where the campus is currently performing and communicates it to the staff.

Teachers advocate for their groups to improve, and teachers are given time in PLC review to work towards improvement. The professional development (PD) period is a non-teaching period in addition to the teacher's conference period. Lead teachers and instructional facilitators work with groups toward continuous improvement of instruction. Lead teachers are also paid a stipend to mentor new teachers. A culture of celebrating student success is very important to the campus. The principal celebrates student success and communicates expectations and current data on student progress. Student rankings and honors are posted for all high school grade levels throughout the school building, and the principal Tweets when new data is posted. He believes that it gets students to take ownership of their learning.

Funding for the campus is provided by the yearly budget as well as Title 1 funding. The principal believes that the extra funding, approximately $18,000, from Title 1 is effective for helping provide extra tutoring and support for the struggling students, and he believes that it eventually impacts student performance on the SAT and ACT. The funds are also used to help pay for substitutes for teachers when the campus is doing instructional rounds.

District Focus.

This section will focus on interview questions that asked the principal about district: personnel, instructional support, advanced courses support, SAT and ACT support, goals, culture, and funding. The principal feels that the Associate Superintendent and Director of advanced academics support student participation and performance on the SAT and ACT. They do so by providing funds to facilitate test

preparation sessions for the SAT and ACT as well as reduce the cost of Advanced

Placement (AP) exams for students on the free and reduced lunch program. In addition to

providing funds, the district also finds people to facilitate preparation programs and

organize them to get it done. The campus just has to provide the building and advertise

the preparation sessions to the students. The district also assists the campus principal

with PSAT data to help better prepare teachers and embed standards into the curriculum.

The district funds the PSAT test to be given to all high school 10th graders in the district

as well as ninth graders recognized as Gifted and Talented (GT). The campus, in

collaboration with the district, also celebrates the superintendent's top 100 scholars based

on scores from the PSAT. The district hosts a celebration for the top 100 scholars to

recognize their high achievement. The principal believes that this support and

recognition helps set the culture of high expectations for all campuses.

Communication.

Three interview questions asked the principal about how the campus and district

communicate with parent and students on the topic of SAT and ACT. The campus

communicates using multiple methods including: Twitter, Facebook, PA announcements,

posters around campus, teacher generated discussion, associate principal meeting with all

classes, and counselors meeting with individual students. The campus also hosts a parent

and student meeting one evening several weeks before the PSAT is given in October.

Everyone is invited and guest speakers present to them about the PSAT. The principal

stated that the district communicates through their website, Twitter, and communication

blasts. The district also facilitates an Ambassador Program in which parents and

community members serve as Ambassadors. They learn about the good things going on in the district and share with the community.

SAT and ACT Preparation.

One interview question was asked regarding SAT and ACT preparation programs that are provided for students on his campus. The principal noted SAT and ACT preparation programs that are offered for students and partially funded by the district. In addition to the test preparation sessions, the principal mentioned that the campus has a high number of advanced classes, academic facilitators to help teachers, and a solid online district curriculum. The extra professional development (PD) period gives every teacher more opportunity to prepare quality lessons and get coaching from the academic facilitators and lead teachers. The principal feels like this combination of strong curriculum, instructional support and test preparation opportunity helps students be successful.

Closing the Gap.

The principal was asked two prepared interview questions that focused on actions taken to close the achievement gap in participation and performance between students groups on the SAT and ACT. The campus has a strong AVID program that support approximately 125 students, and most of them come from the lower performing student populations with low socio-economic status. The AVID program, which is offered in junior high as well, supports the students with elective classes that teach them how to stay organized, take good notes and learn how to be a successful student. The AVID program provides additional tutors for the students and promotes a college going culture. The

campus has an AVID elective class for ninth through twelfth grades, and he uses a team of four teachers to facilitate the classes because he feels like a team of teachers is most effective. The campus also has an AVID coordinator and an AVID site team that meets regularly. In addition to AVID, the campus has a targeted ninth grade initiative that puts lots of emphasis on the success of ninth graders and helping them earn credits and build momentum toward their future high school years. One assistant principal and one counselor are dedicated to ninth graders, and they remain in that position year after year. The ninth grade principal and counselor work with students on attendance gaining credits and building relationships. The campus also incorporates a daily advisory period where each staff member has approximately 15 students. Teachers use the time to teach students success strategies, facilitate book studies, review course selection and just mentor the students. The staff member maintains that advisory group all four years, and the principal believes that it helps build relationships.

Independent School District B

Independent School District B was established in 1854 and operates in the community of a large Texas suburb with a land mass of approximately 40 square miles. In 2015, more than 38,000 students are educated on the district's campuses which includes four high schools, seven junior highs, and more than forty elementary schools. The district's vision states that all students will learn, grow, and succeed. The district's mission statement says it will serve and prepare all students for their global future. The district values: integrity, inspiration, inclusiveness, and innovation. Core beliefs support that the staff should focus on the students, and the administration should focus on the

staff. District awards and distinctions include: a 5 year extended graduation rate exceeding 94%, 23 Department of Education National Blue Ribbon campuses, named Best Academically Performing school district in Texas (2010), 25 seniors named Dell Scholars between 2012-2014, and STAAR passage rates exceeding the Texas average in every subject. Particularly important to this study is the College and Career Readiness department in the district. The department is led by an executive director, and the stated purpose of the department is to assist students in the acquisition of skills necessary to become successful in education after high school. The department supports initiatives that include: a college-going culture in K-12, exploring career opportunities K-12, parent engagement K-12, AVID skills K-12, PreAP and AP in grades 7-12, dual credit in high school, and SAT/ACT preparation in high school. In addition to a strong College and Career Readiness department, the district also has an active Advancement Via Individual Determination (AVID) department. The department is led by a district director and supported by AVID coordinators. In 2013, the district had AVID elective classes on 23 campuses and was the only district in Texas to have two high schools be represented as National Demonstration Sites.

One district administrator, the Director of College and Career Readiness, agreed to answer questions regarding their role in student participation and performance on the SAT and ACT. The first research question of this study asked, "What leadership actions do school leaders report to influence the participation and performance on the SAT and ACT?" The third research question of this study asked, "How do school leaders report their leadership actions to impact student participation and performance on the SAT and

ACT?" Director of College and Career Readiness was asked to reply to seven questions that link to the first and third research question. The seven interview questions included:

1) What do you do that impacts student participation on the SAT and ACT?

2) What do you do that impacts student performance on the SAT and ACT?

3) What programs/preparation courses are in place to improve the performance on the SAT and ACT?

4) How does the district communicate with students and parents about the SAT and ACT?

5) What is done to increase the number of students taking advanced classes in your district?

6) What goals does the district have regarding SAT and ACT participation and performance?

7) How does the culture of the district contribute to student participation and performance on the SAT and ACT?

The Director of College and Career Readiness serves in a direct leadership role with student participation and performance on the SAT and ACT. One thing he does is provide the funding for all district eleventh graders to take the ACT. His department also provides four sessions of free SAT preparation for all high school eleventh and twelfth grade students. These preparation sessions are designed and implemented by district staff. Students also are given access to free online test preparation through Kaplan which they may access at any time. In addition to getting more students to take the ACT for the first time, they district is seeing a significant increase of students attempting it for a

second time. Before the Director served in his current role, the district used another test

preparation company in which the district subsidized the program for the students. The

program offered a certain number of classes, but they noticed that the classes we not

filling up. Currently the district allows any test preparation company to offer their

services, but they require the company to do their own marketing and pay building usage

fees. Communication between the district and the school community is facilitated

through the district website and Naviance which is a college and career readiness

program that the district uses.

To increase the number of students taking Advanced Placement (AP) classes, the

district utilizes data from the PSAT. The district funds all high school sophomores to

take the PSAT and then uses AP Potential to analyze the results. AP Potential helps the

district and high school campuses identify all students who may have the ability to be

successful in AP classes. Data from the PSAT and AP Potential is provided to campus

counselors and AP course teachers. Counselors are charged with speaking with and

encouraging students to enroll in AP courses. AP course teachers use the data to recruit

new students to their classes which helps further increase AP course enrollment. The

district supports a program called AP Ambassadors in which current AP students are

selected to help recruit current high school and junior high students into AP courses.

The district's goal for student participation and performance on SAT, ACT, and

AP classes is continuous improvement. The district embeds aligned curriculum into

English language arts and science courses in ninth through twelfth grades to assist with

student performance. Similar SAT and ACT questions are also built into the district

assessments to help build student exposure and capacity to perform. Additionally, the district funds each high school campus to have a College and Career coordinator. These campus coordinators sole responsibility is to work with students to develop a plan for after graduation. They train students on Naviance, counsel them about careers and provide them the resources and support to pursue college.

The fourth research question of this study asked, "How do school leaders report their leadership actions to impact closing the achievement gap on participation and performance on the SAT and ACT?" The Director of College and Career Readiness was asked to reply to two questions that link to this fourth research question. The two interview questions linked to the fourth research question included:

1) What actions have been taken to close the gap in student SAT/ACT participation and performance?

2) What is the district role with Advancement Via Individual Determination (AVID)?

It was observed that the district is willing to help all students have access to SAT, ACT, AP exams and test preparation for those exams. The district provides scholarships to cover the cost of exams and test preparation. The Director of College and Career Readiness reiterated that the district already pays for all high school sophomores to take the PSAT and all juniors to take the ACT at no cost. After scores come back, campus staff meets with students and helps them determine the next step. The Director stated that two of the district high schools are current AVID demonstration sites, 10 of 40 elementary schools implement AVID along with all junior high and high schools. The

district serves 1900 students through the AVID program. AVID teachers promote college, take students on college visits, and college tutors come to campus to help the students. Eleven district students were Dell finalists or semi-finalists, and the Director believes that all are AVID students. The district has been implementing AVID for approximately 15 years.

High School B

High school B was founded in 1964. It is located in a large suburban community in an independent school district that supports a total of four high schools and a district enrollment of more than 38,000 students in 2015. The mission of High school B is, "Inspire Individual Greatness and Meaningful Careers for All". The campus and community believe the tradition of excellence comes from the high expectation of success that is shared by the community, staff, parents and students. Campus distinctions and accomplishments include: 73 National Merit Finalists between 1996 and 2014, National Blue Ribbon School 2002, numerous academic and athletic recognitions, and an Advancement Via Individual Determination (AVID) program that was named a National Demonstration School in 2007.

The high school principal agreed to meet for a face-to-face interview lasting approximately one hour. The principal invited the campus college and career coordinator to join the interview, and she also responded to prepared questions. Interview questions were designed to answer the four primary research questions of this study. The first eighteen prepared interview questions focus on the principal's role and perceptions of their leadership impact on impacting student participation and performance on the SAT

and ACT. The last two prepared interview questions focus on the principal's role and

perceptions of their leadership impact to close the achievement gap between student

populations on the SAT and ACT. Some discussion and impromptu questions did occur

during the one hour face-to-face interview, and those will also be shared in this section.

Leadership Actions.

The first two interview questions focused on direct actions that the principal and

coordinator believe influence SAT and ACT participation and performance on the

campus. To improve participation, the coordinator works organizes two of her interns to

create a SAT and ACT drive. They set up tables by the cafeteria to advertise upcoming

test dates to students, and they assist students in getting signed up, printing tickets and

even taking pictures for the tickets. The coordinator sends out a weekly news bulletin

that advises students and parents about upcoming test dates and resources to prepare. If

students have financial need, she assists in getting them a reduced price. She also

organizes for a guest speaker from the Princeton Review to speak with students and

parents and to answer any questions they may have. Although she does not directly

support the AVID program, the coordinator works with students that are involved in

AVID, and she assists them with test preparation resources. She states that the AVID

teachers are promoting test preparation and studying vocabulary in their classrooms. The

principal's role is communicating the expectation that all students are going to college.

He communicates that he wants his AP, career and technology, and AVID program to

continue growing. He tells his teachers to grow their AP programs, and teachers respond

by recruiting students with fliers, posters, and announcements. The principal believes

that increasing student participation in high level academic programs impacts the participation and performance on the SAT and ACT because it exposes them to higher levels of rigor. The principal sets goals for his campus to improve, and one goal is to double AP enrollment.

External Factors.

The next two interview questions focused on external factors that the principal and coordinator believes makes the campus successful on the SAT and ACT. The campus community is fortunate to have a very affluent and philanthropic core. Several service organizations provide significant funds, volunteers, and recognition for the students. The service organization are unique in that they celebrate and support all students. The community has high expectations for all student's success, and they do whatever it takes to support the kids to pursue college.

Campus Focus.

This section will focus on interview questions that asked the principal about: campus personnel, classroom instruction, advanced coursework, culture, funding and goals related to participation and performance on the SAT and ACT. Key campus personnel include the counseling staff, college and career coordinator, AVID coordinator and AVID teachers. The counseling staff is always accessible to the students, and the college and career coordinator facilitates a center that provides resources to help students learn about SAT and ACT, sign up for exams, and access preparation materials. The AVID coordinator works with the other AVID teachers, and they teach AVID prep classes which help prepare students for college.

Instructionally, the campus values the AVID program and the teaching strategies that it incorporates. More specifically, strategies stressed in AVID include Cornell notes and the Socratic Method. This campus was an AVID national demonstration school in 2007, and the principal wants to work towards regaining that level of success. The goal is to have all teachers trained and implementing AVID strategies in every classroom. Curriculum is online and developed by the district. It includes a framework, goals and resources, but teachers still have some autonomy.

Advanced Placement (AP) courses are a priority for the campus. The principal assigned an assistant principal to directly work to improve the AP program, and the principal charges each AP teacher to take ownership of their class and strongly recruit new students. To support recruitment, the principal provides substitutes so teachers can visit classroom to market their programs. The campus hosts a graduation plan night in which more than 30 teachers will set up tables to recruit students into their AP classes. Additionally, the principal visits the AVID classes and encourages the students to sign up for several AP courses, and he charges the campus AVID coordinator help make it happen. The campus has 18 AP student ambassadors that work to endorse and recruit for the AP programs. The ambassadors visit junior high schools, including 6th grade classes, and start the education and recruitment process early.

Goals for campus SAT and ACT participation and performance are the same as they are for AP. The principal seeks continuous improvement. To drive this process, he incorporates Instructional Rounds which he learned about when he visited Harvard

University. The principal wants classrooms to be instructionally driven as opposed to content driven.

Funding to support participation and performance on the SAT and ACT comes mostly from the district, but several community service organizations also contribute generously. District funds pay for 10th grade students to take the PSAT and eleventh grade students to take the ACT. The district also facilitates a reduction in cost for students that are on the reduced lunch program.

District Focus.

Several interview questions asked the principal and coordinator about district: personnel, instructional support, advanced courses support, SAT and ACT support, goals, culture, and funding. The principal and coordinator agree that the school board, superintendent and director of college and career readiness contribute to the campus' success. The school board and superintendent support the college going culture and high expectations by funding all students to take the PSAT and ACT.

Communication.

Three interview questions asked the principal about how the campus and district communicate with parent and students on the topic of SAT and ACT. The campus uses announcements, the campus website, college and career website, Facebook, and mass callouts to provide students and parents with information. Information includes upcoming test dates and preparation resources. The campus also hosts a parent night and invites a guest speaker from Princeton review to present and answer questions. Additionally, the campus hosts a breakfast of champions for parents. The principal talks

to the parents about helping their child build a resume to get into college. He talks about the need for students to challenge themselves and a change in mindset from going to college to a mindset of getting ready to graduate from college. The district uses its website and a weekly email newsletter that informs parents about SAT and ACT as well as other important topics.

SAT and ACT Preparation.

One interview question was asked regarding SAT and ACT preparation programs that are provided for students on his campus. The district offers test preparation at reduced cost for students with financial need. Test preparation sessions are offered at each high school campus. The district also works with Kaplan to provide free online preparation materials for its students.

Closing the Gap.

The principal was asked two prepared interview questions that focused on actions taken to close the achievement gap in participation and performance between students groups on the SAT and ACT. The principal believes that the district's funding and staffing of college and career coordinators on each campus has provided access to necessary resources for all students. He reiterated that the strong support of the community and the service organizations focus on all students makes an impact. The investment in AVID and training for the teachers is a tremendous investment. The principal believes when you invest in your teachers, it is easy to ask for a return in the students.

Discovered Similarities

While reviewing the results from interviews with the two districts and two high school campuses involved in this study, similarities were discovered in several areas of practice. The similarities are important to help answer one of this study's research questions that asks, "What are the similarities and differences in reported leadership actions between the studied districts and high school campuses?" Identified similarities in this study exist at both the district and campus level and include: expectations, culture, funding, personnel, communication and programming.

The two districts included in this study both operate in large suburban communities in Texas with district enrollment totaling more than 20,000 students and boasting a graduation rate higher than state averages. Both districts involved in the study communicate high expectations for student's success through their vision, mission and goals. Both districts have well organized advanced academic or college and career readiness departments that are staffed to support SAT, ACT, and AP performance for all students. Through district leadership, and backed with district funding, high school campuses were able to provide their students with a variety of resources to help them be more successful on the SAT and ACT. One of the studied districts supplements the cost of test preparation by funding half of the provider's fee while the other district provides free test preparation that is designed and implemented using district staff. Both districts pay for all students to take the PSAT, and one district pays for all eleventh grade students to take the ACT. This study found both districts to have strong AVID programs that help prepare at-risk students to be successful in college. AVID programs were staffed with

district personnel to support the campuses. Additionally, both districts in the study implemented communication efforts to keep the school community informed. Communication techniques included parent night meetings, mass communication blasts, and use of the district websites to promote SAT, ACT, and AP.

The two high school campuses included in the study also shared similarities. Both schools share visions that focus on high student achievement and enjoy school communities that value high expectations for student success. Both principal's interviewed in this study have a focus and mindset of continuous improvement with an emphasis on student performance and academic rigor. The principals both stressed the importance of students taking advanced classes and working towards increasing enrollment and performance of all students in those classes. To improve instruction, principals both incorporate instructional rounds learned at Harvard University, and they use the data from that process to drive conversation and work towards instructional improvement. To communicate with students, both high school campuses incorporate multiple methods including: Twitter, call-outs, announcements, parent nights, classroom visits, and counseling sessions. Principals and other staff speak with students about the importance of taking AP courses as well as taking and preparing for the SAT and ACT. Both high schools have active AVID programs that implement AVID elective classes as well as incorporate AVID strategies school wide. Principals at both campuses spoke highly and confidently of the work and difference that AVID teachers and students do to prepare for college. When asked about closing the achievement gap between student populations on campus, both principals gave credit to the AVID program.

Analysis

This study sought to identify leadership practices that school leaders report to impact student participation and performance on the SAT and ACT, and the intent was also to identify links between those identified practices with research based leadership practices. The interview process was used to identify leadership practices at studied district and high school campuses. Research based leadership practices presented for this study were provided through the Council of Chief State School Officers (2008) as well as research conducted by Robert Marzano (2005).

The Council of Chief State School Officers [CCSSO] (2008), with contributions from the National Policy Board for Educational Administration and The Wallace Foundation, developed the Interstate School Leaders Licensure Consortium, otherwise known as the ISLLC, and set forth six Educational Leadership Policy Standards for effective school leadership. The following standards represent the latest set of high-level policy standards for education leadership. It "provides guidance to state policy makers as they work to improve education leadership preparation, licensure, evaluation, and professional development" (The Council of Chief State School Officers [CCSSO], 2008, p. 1). Marzano (2005) identified twenty-one behavior categories that school leaders demonstrate to have correlations with student achievement. "The average correlation of leadership practices to student achievement in this meta-analysis study was .25" (p. 41). Marzano's twenty-one behavior categories, which he labels responsibilities, match up well with the six ISLLCC Educational leadership policy standards. Similarities between Marzano's study and the ISLLC standards are noted below.

Leadership Standard 1.

ILSSC Standard 1 states, "An educational leader promotes the success of every student by facilitating the development, articulation, implementation, and stewardship of a vision of learning that is shared and supported by all stakeholders. Functions of standard 1 include (a) collaboratively develop and implement a shared vision and mission; (b) collect and use data to identify goals, assess organizational effectiveness, and promote organizational learning; (c) create and implement plans to achieve goals; (d) promote continuous and sustainable improvement; and (e) monitor and evaluate progress and revise plans" (CCSSO, 2008, p. 14). ISLLC Standard 1 strongly relates to six of Marzano's (2005) leadership responsibilities including: Change Agent, Flexibility, Focus, Input, Optimizer, and Situated Awareness.

This study, through the interview process, identified links between the leadership practices of studied subjects and the research based leadership practices described above. Specifically, it was observed that studied subjects demonstrated Marzano's (2005) leadership responsibilities of: Change Agent, Focus, and Situated Awareness.

Change Agent.

Change Agent is described by Marzano (2005) as the willingness to challenge and actively challenge the status quo. Subjects in the studied district and high schools described a constant push for improvement, and they were driven to continuously improve upon their prior performance. They used data to identify students for advanced courses, and principals led instructional rounds on their campus' to gather data to use for improvement.

Focus.

Subjects interviewed in the study also demonstrated the leadership responsibility of Focus. Focus can be described by establishing clear goals and keeping the goals as the primary focus (Marzano et al., 2005). Both districts and campuses studied demonstrated clear vision and goals through their officially published statements but also through their leadership actions. They emphasized high achievement for all students and reported support for high achievement by using data to identify students to take Advanced Placement (AP) courses. Additionally, districts and campuses communicated their vision and high expectations for high achievement using multiple methods of communication to inform students, parents, teachers and other members of the school community.

Situated Awareness.

Another leadership responsibility, Situated Awareness, may be described as detailed awareness of the school environment and using the available information to identify and solve potential problems (Marzano et al., 2005). Subjects interviewed at both the district and campus levels demonstrated this leadership responsibility through the continual use of current data to identify trends and make plans for improvement. Specifically, principals at both campuses implemented instructional rounds in which groups of teachers visited classrooms and made observations. They collected data based on their observations, and the principal's used the data to initiate discussion with teachers in an effort to improve instruction and student performance.

Leadership Standard 2.

ISLLC Standard 2 states, "An educational leader promotes the success of every student by advocating, nurturing, and sustaining a school culture and instructional program conducive to student learning and staff professional growth. Functions of standard 2 include (a) nurture and sustain a culture of collaboration, trust, learning, and high expectations; (b) create a comprehensive, rigorous, and coherent curricular program; (c) create a personalized and motivating learning environment for students; (d) supervise instruction; (e) develop assessment and accountability systems to monitor student progress; (f) develop the instructional and leadership capacity of staff; (g) maximize time spent on quality instruction; (h) promote the use of the most effective and appropriate technologies to support teaching and learning; and (i) monitor and evaluate the impact of the instructional program" (CCSSO, 2008, p. 14). ISLLC Standard 2 strongly relates to nine of Marzano's (2005) leadership responsibilities including: Affirmation, Contingent rewards, Communication, Culture, Intellectual stimulation, Involvement in curriculum and instruction, Knowledge of curriculum and instruction, Relationships, and Visibility.

This study, through the interview process, identified links between the leadership practices of studied subjects and the research based leadership practices described above. Specifically, the study found that studied subjects demonstrated Marzano's (2005) leadership responsibilities of: Affirmation, Contingent Rewards, Communication, Culture, and Involvement with Curriculum and Instruction.

Affirmation and Contingent Rewards.

Affirmation may be described as celebrating accomplishments while

acknowledging failures, and Contingent Rewards may be described as recognizing

individual accomplishments (Marzano et al., 2005). Affirmations and Contingent

Rewards identified in this study included: hosting annual ceremonies to celebrate the top

district performers on the PSAT and recognizing individual performance awards such as

Dell Scholars.

Communication.

The leadership responsibility titled Communication may be described as

establishing clear communication among teachers and students (Marzano et al., 2005).

District communication identified in this study included: college 101 presentations for

students and parents, professional consultant presentations on the topics of

PSAT/SAT/ACT, district website communication, newsletters, and one district uses the

web-based program Naviance. Campuses also employed a variety of tactics to

communicate with students and parents. Campus leaders employed social media

including Facebook and Twitter to keep students updated about upcoming test dates and

test preparation resources. Additionally, campus based communication included: daily

announcements, posters around school, parent nights, teacher generated discussion,

counselor visits to classrooms and with individual students, mass communication blasts,

and campus websites.

Culture.

The leadership responsibility titled Culture may be described as fostering shared

beliefs, a sense of community and collaboration (Marzano et al., 2005). Both districts

and campuses studied shared a similar culture that may be described as focused on

college going and expectation for high achievement. Studied districts provide significant

funding for programs to boost the Advanced Placement (AP) program as well as support

students to prepare for and take college entrance exams including the SAT and ACT.

Districts staff departments and campus personnel with the focus of improving these

programs. Campus leaders push for improved AP programs and support the growth with

communication from campus leaders and recruitment from the AP course teachers.

Curriculum and Instruction.

The leadership responsibility titled Involvement in curriculum and instruction

may be described as the leader being directly involved in the design and implementation

of curriculum and instructional practices (Marzano et al., 2005). Both interviewed

district leaders worked in some capacity to implement SAT and ACT level curriculum

and assessment for their districts. One district administrator worked with curriculum

department leaders to implement SAT and ACT style curriculum while the other district

administrator worked to incorporate SAT and ACT style questions into district

assessments. Both interviewed principals also worked to improve the instructional

process on their campuses. Both incorporated instructional rounds in which they led

teachers in observing campus classes and used the data to generate discussion to improve

instruction. They also both focus on improving their AP programs through master

scheduling and recruitment into the AP courses. Student AP ambassadors are selected by staff and are used to recruit current high school students as well as junior high students into the AP courses. Additionally, both campuses implement the AVID program both as an elective class and as campus wide instructional strategies. The AVID program serves at-risk students and helps prepare them for college by giving them the skills and support to be successful. Principals actively support the program and have their staffs trained to implement AVID strategies in all campus classes.

Leadership Standard 3.

ISLLC Standard 3 states, "An educational leader promotes the success of every student by ensuring management of the organization, operations, and resources for a safe, efficient, and effective learning environment. Functions of standard 3 include (a) monitor and evaluate the management and operational systems; (b) obtain, allocate, align, and efficiently utilize human, fiscal, and technological resources; (c) promote and protect the welfare and safety of students and staff; (d) develop the capacity for distributed leadership; and (e) ensure teacher and organizational time is focused to support quality instruction and student learning" (CCSSO, 2008, p. 14). ISLLC Standard 3 strongly relates to three of Marzano's (2005) leadership responsibilities including: Discipline, Order, and Resources.

This study, through the interview process, identified links between the leadership practices of studied subjects and the research based leadership practices described above. Specifically, the study found that studied subjects demonstrated Marzano's (2005) leadership responsibility titled Resources.

Resources.

Resources may be described as providing teachers with necessary materials and support for professional development so they may be successful in their job (Marzano et al., 2005). The study identified resources provided at the district and campus level. Studied districts provide funding to support the staff development of the campuses as well as provide for direct professional development provided by district personnel or hired consultants. The district also funds AVID and supports the staffing of AVID teachers and training for staff. The campus leader were also found to directly provide the tools needed for teachers to be successful in their jobs. Both campus principals lead teacher on instructional rounds which allow them to observe other campus classes. One campus has a designated professional development period, in addition to the teacher's conference period, and teachers meet to discuss the instructional process on a daily basis. They are supported by lead teachers and administrators.

Leadership Standard 4.

ISLLC Standard 4 states, "An educational leader promotes the success of every student by collaborating with faculty and community members, responding to diverse community interests and needs, and mobilizing community resources. Functions of standard 4 include (a) collect and analyze data and information pertinent to the educational environment; (b) promote understanding, appreciation, and use of the community's diverse cultural, social, and intellectual resources; (c) build and sustain positive relationships with families and caregivers; and (d) build and sustain productive

relationships with community partners" (CCSSO, 2008, p. 15). ISLLC Standard 4 strongly relates to Marzano's (2005) leadership responsibility titled Outreach (.27).

This study, through the interview process, identified links between the leadership practices of studied subjects and the research based leadership practices described above. Specifically, the study found that studied subjects demonstrated Marzano's (2005) leadership responsibility titled Outreach.

Outreach.

Outreach may be described as being the lead spokesman and advocating for the school with all stakeholders (Marzano et al., 2005). The district and campus leaders interviewed demonstrated outreach through strong communication as previously described under ISLLC Standard 2. Principals host parent meetings to provide information about SAT and ACT as well as other topics. One of the principals demonstrated exceptional outreach through maintaining relationships with community organizations which provide significant support and funding for the campus.

Leadership Standard 5.

ISLLC Standard 5 states, "An educational leader promotes the success of every student by acting with integrity, fairness, and in an ethical manner. Functions of standard 5 include (a) ensure a system of accountability for every student's academic and social success; (b) model principles of self-awareness, reflective practice, transparency, and ethical behavior; (c) safeguard the values of democracy, equity, and diversity; (d) consider and evaluate the potential moral and legal consequences of decision-making; and (e) promote social justice and ensure that individual student needs inform all aspects

of schooling" (CCSSO, 2008, p. 15). ISLLC Standard 5 strongly relates to Marzano's (2005) leadership responsibility titled Ideals/Beliefs (.22).

This study, through the interview process, identified links between the leadership practices of studied subjects and the research based leadership practices described above. Specifically, it was found that studied subjects demonstrated Marzano's (2005) leadership responsibility titled Ideals and Beliefs.

Ideals and Beliefs.

Ideals and Beliefs may be described as the leader communicating and operating with strong beliefs about leading their schools (Marzano et al., 2005). Both interviewed principals described their process to improve their campuses with a focus on increasing the rigor through improved AP programs as well as continual engagement with teachers to improve the instructional process. The principals implemented similar strategies including: instructional rounds, use of data, communication, and professional development for their staffs.

Leadership Standard 6.

ISLLC Standard 6 states, "An educational leader promotes the success of every student by understanding, responding to, and influencing the political, social, economic, legal, and cultural context. Functions of standard 6 include (a) advocate for children, families, and caregivers; (b) act to influence local, district, state, and national decisions affecting student learning; and (c) assess, analyze, and anticipate emerging trends and initiatives in order to adapt leadership strategies" (CCSSO, 2008, p. 15). ISLLC

Standard 6 strongly relates to two of Marzano's (2005) leadership responsibilities titled Outreach (.27) and Flexibility (.28).

This study, through the interview process, identified links between the leadership practices of studied subjects and the research based leadership practices described above. Specifically, it was found that studied subjects demonstrated Marzano's (2005) leadership responsibility titled Outreach.

Outreach.

Outreach may be described as being the lead spokesman and advocating for the school with all stakeholders (Marzano et al., 2005). The district and campus leaders interviewed demonstrated outreach through strong communication as previously described under ISLLC Standard 2. Principals host parent meetings to provide information about SAT and ACT as well as other topics. One of the principals demonstrated exceptional outreach through maintaining relationships with community organizations which provide significant support and funding for the campus.

Chapter V

Conclusions

The purpose of this study was to identify leadership practices that school leaders report to impact student participation and performance on the SAT and ACT as well as close the achievement gap between student groups. Specifically, this study used archival data to identify high performing high schools in the area of SAT and ACT participation and performance. High schools in this study were selected based on set criteria including:

- the high school will outperform state averages in the categories of participation and performance on the SAT and ACT;

- the high school will outperform their campus group in the categories of participation and performance on the SAT and ACT;

- the high school will have a low socio-economic status student population of 40 percent or greater; and

- the high school will be ethnically diverse with 40 percent or more of total students being identified as Hispanic or African American.

This study used the interview process to identify practices of those identified campus and district leaders. The study compared and contrasted the reported leadership actions between the studied districts and high school campuses.

As a result of the study, similarities in leadership practices between studied high schools and districts became evident. Similarities in practice between the two studied districts were found in areas including: expectations, staffing, funding, communication,

AVID, and focus on advanced coursework. Similarities in practice between the two studied high schools were found in areas including: expectation, focus on improvement, communication, AVID, and focus on advanced coursework. The results of this study have strong implications for school leaders. Appropriate leadership actions can improve student participation and performance on the SAT and ACT as well as close the achievement gap between student populations. The study identified the following leadership actions to answer the research questions.

Discussion of Results

The following section describes how the results of the interview process answered each of the four research questions of the study. Results will describe specific leadership actions that were reported to influence student participation and performance on the SAT and ACT as well as close the gap between student populations. Similarities between interviewed district and school leader actions are also identified.

Leadership actions.

Data from chapter four demonstrate how district and campus leaders' report their leadership actions influences student participation and performance on the SAT and ACT. District leaders reported funding the advancement of participation and performance on the SAT and ACT primarily through funding, curriculum support and programming, but they also supported high achievement by celebrating campus and student success. Funding from districts was found to support: district personnel, campus personnel, administering of PSAT and ACT at no cost to students, and reduced cost or free test preparation and resources for SAT and ACT. District personnel supported

campuses with curriculum and data support. Curriculum support included working with

district curriculum departments to embed SAT and ACT level work into district

curriculum and district assessments. Funded campus personnel, including college and

career coordinators, directly assisted students with sign-up and preparation for SAT and

ACT. Also supported and funded by each studied district was the AVID program. AVID

supports student populations, who are underrepresented in higher education, by providing

them with elective classes that provides them with skills and support they need to get

college ready. Communication about the SAT and ACT was provided primarily through

the district websites.

Campus leaders reported a focus on high student achievement and continuous

improvement of the instructional program. Principals also reported having a keen focus

on their campus Advanced Placement (AP) program, and they supported the program

with expectation, communication, and heavy recruitment. Campus personnel, including

counselors and college and career coordinators, worked directly with students to help

them sign-up and prepare for the SAT and ACT. Campuses communicated with students

and parents using multiple modes of communication including: social media, mass

communication blasts, announcements, posters, classroom visits, individual student

counseling, and the campus website. Both studied campuses also implemented strong

AVID programs.

Similarities between leader responses.

Districts leaders in this study reported more similarities than differences in their

practice. Both district leaders worked with curriculum departments to embed SAT and

ACT level work, and both supported campuses to improve their AP programs. Both districts funded the PSAT for all students, and both provided funding to support SAT and ACT test preparation. Communication at the district level was very similar with most information being provided by the district websites. Differences included: one district funded all eleventh grade students to take the ACT and hosted a College 101 night for parents while the other district funded the staffing of a college and career coordinator for each high school campus.

Campus leaders also reported more similarities than differences in their practice. Both principals spoke of a focus on continuous improvement as well as focus to improve their AP program. The campuses both used multiple methods of communication to inform students and parents about the SAT and ACT, and both campuses supported a strong AVID program to support at-risk student populations. Both principals reported leading their teachers in the process of instructional rounds to observe classes, gather data and work to improve the instructional process. Differences included: one campus staffed a college and career facilitator to assist students with SAT and ACT and was actively supported financially by community organizations while the other campus used Title 1 funding.

How leaders impact SAT and ACT participation and performance.

Funding from districts was reported to support: district personnel, campus personnel, administering of PSAT and ACT at no cost to students, and reduced cost or free test preparation and resources for SAT and ACT. Providing free administration of the PSAT and ACT provides all students with the opportunity to experience this form of

standardized testing without the financial burden. The district that funds administration of the ACT for all eleventh graders reported a significant increase in the number of students taking the ACT for a second time. Reduced cost and free SAT and ACT preparation increases the number of students that have access to those resources.

District personnel directly supported campuses with curriculum and data support. Curriculum support included working with district curriculum departments to embed SAT and ACT level work into district curriculum and district assessments. Embedding high level content into the daily curriculum and district assessments provides students frequent opportunities to be exposed to rigorous practice and assessment. Frequent practice and assessment of rigorous material can impact the instructional program and potentially SAT and ACT performance.

Funded campus personnel, including college and career coordinators, directly assisted students with sign-up and preparation for SAT and ACT. Personnel directly supporting students to sign up and prepare for the SAT and ACT impacts student participation and student performance by increasing access to materials and support.

Also supported and funded by each studied district was the AVID program. AVID supports student populations, who are underrepresented in higher education, by providing them with elective classes that provides them with skills and support they need to get college ready. The AVID program was reported to assist the district and campus in closing the achievement gap by providing instruction and support to students who may not otherwise receive it.

Communication about the SAT and ACT was provided primarily through the district websites. Communication with students and parents, on the topic of SAT and ACT, allows them to be more informed and aware of processes and resources to participate and prepare for those exams.

Campus principals reported a focus on high student achievement and continuous improvement of the instructional program. This clear focus helps staff, students, and parents identify expectations and move towards meeting them. Principals also reported having a keen focus on their campus Advanced Placement (AP) program, and they supported the program with expectation, communication, and heavy recruitment. Increasing the number of students in AP courses also increases the number of students that are exposed to rigorous curriculum on a frequent basis. Frequent access to rigorous curriculum is helpful for students when they take rigorous exams like the SAT and ACT.

Campus personnel, including counselors and college and career coordinators, worked directly with students to help them sign-up and prepare for the SAT and ACT. Personnel designated to work directly with students, to assist them with SAT and ACT preparation and administration, improves the access for all students. Access to the exams increases participation, and access to preparation increases performance.

Campuses communicated with students and parents using multiple modes of communication including: social media, mass communication blasts, announcements, posters, classroom visits, individual student counseling, and the campus website. Communication with students and parents, on the topic of SAT and ACT, allows them to

be more informed and aware of processes and resources to participate and prepare for those exams.

Both studied campuses also implemented a strong AVID program. AVID supports student populations, who are underrepresented in higher education, by providing them with elective classes that provides them with skills and support they need to get college ready. The AVID program assists the district and campus in closing the achievement gap by providing instruction and support to students who may not otherwise receive it.

How leaders impact closing the achievement gap.

Funding from districts was reported to support closing the achievement gap through: district personnel, campus personnel, administering of PSAT and ACT at no cost to students, and reduced cost or free test preparation and resources for SAT and ACT. Providing free administration of the PSAT and ACT provides all students with the opportunity to experience this form of standardized testing without the financial burden. Reduced cost and free SAT and ACT preparation increases the access to those resources for all students.

Also supported and funded by each studied district and campus was the AVID program. AVID supports student populations, who are underrepresented in higher education, by providing them with elective classes that provides them with skills and support they need to get college ready. The AVID program assists the district and campus in closing the achievement gap by providing instruction, skills, and support to students who may not otherwise receive it (AVID Center, 2014).

Implications for School Leaders

School leaders at the district and campus level are charged with ensuring a successful instructional program that challenges and engages all students at the highest possible level. They are also responsible for providing the skills and resources for all students to be successful after graduation. SAT and ACT examinations remain an important criteria for students entering college, but participation and achievement gaps persist between student populations. This study has identified similarities in the reported practice of district and campus leaders that have achieved high levels of student participation and performance on the SAT and ACT.

The study was able to identify areas that school leaders report to positively impact student participation and performance on the SAT and ACT. Identified areas include: expectation and focus, funding, personnel, AVID, and communication. These categories, which may include commonality with one another, offer district and campus leaders areas of focus when seeking improvement of student participation and performance on the SAT and ACT.

This study's findings would indicate that school districts and campuses should provide for specific focus on SAT and ACT participation and performance. To achieve sustained focus, school districts should provide appropriate staffing, including leadership, which have direct responsibility to ensure success with SAT and ACT participation and performance. District leaders can improve student access to SAT and ACT style work by incorporating it into district provided curriculum and assessments as well as providing a substantial effort to increase enrollment, of all student populations, in advanced

coursework. School districts must provide funding to support participation and preparation for SAT and ACT. Participation of all students on SAT and ACT should be supported with district funding, and time within the school day should be allocated for students to take the exams. Providing free or reduced cost examinations and preparation are essential to closing the achievement gap in student's participation and performance on the SAT and ACT. To additionally support closing the achievement gap on SAT and ACT, districts and campuses should support their at-risk student populations with programming like AVID. Communication on the topic of SAT and ACT must be clear and supportive, and it should incorporate multiple methods to reach all students and parents.

Implications for Future Research

This study has the potential to be expanded upon in a number of areas of improvement in SAT and ACT participation and performance. Based on this study, future research may be addressed in areas including: access to SAT and ACT examinations, access to SAT and ACT preparation programs and resources, district staffing aligned with supporting SAT and ACT participation and performance, district funding to support SAT and ACT participation and performance, embedding SAT and ACT style work into district curriculum, AVID's impact on SAT and ACT participation and performance, and communication with parents and students on the topic of SAT and ACT.

References

ACT. (2012). *The condition of college & career readiness: 2012 national*. Retrieved

from http://www.act.org/research-policy/college-career-readiness-report-2012/

AVID Center. (2014). http://www.avid.org

Adams, C. (2011, March 2). Value of test-prep courses for college admission unclear.

Education Week, 30(22), 10-11.

Anderson, D. (2010). Closing the achievement gap on ACT & SAT. Education

Partnerships, Inc.

Anderson, D. (2010). Closing the achievement gap on SAT & ACT. *Education*

Partnerships, Inc., 1-9. http://dx.doi.org/Retrieved from

Anderson, S., Leithwood, K., & Strauss, T. (2010, July-September). Leading data use in

schools:Organizational conditions and practices at the school and district levels.

Leadership & Policy in Schools, 9(3), 292-327.

Bali, V. A., & Alvarez, R. M. (2004, August). The race gap in student achievement

scores: longitudinal evidence from a racially diverse school district. *Policy*

Studies Journal, 32(3), 393-415.

Barth, R. S. (2002, May). The culture builder. *Educational Leadership, 59*(8), 6-11.

Barth, R. S. (2006, March). Improving relationships within the schoolhouse. *Educational*

Leadership, 63(6), 8-13.

Bass, B. M. (1985, Winter). Leadership: Good, Better, Best. *Organizational Dynamics,*

13(3), 26-40.

Bass, B. M. (1990). From transactional to transformational leadership: Learning to share

the vision. *Organizational Dynamics, 18*(3), 19-31.

Buchmann, C., Condran, D. J., & Roscigno, V. J. (2010, December). Shadow education,

American style: Test preparation, the SAT and college enrollment. *Social Forces,*

89(2), 435-462.

Burns, J. M. (1978). *Leadership.* New York, NY: Harper and Row.

Burns, J. M. (1979, May). Two excerpts from leadership. *Educational Leadership, 36,*

380-383.

Clinedinst, M. E., Hurley, S. F., & Hawkins, D. A. (2012). *State of College Admission*

2012. Retrieved from National Association for College Admission Counseling

website:

http://www.nacacnet.org/research/PublicationsResources/Marketplace/research/Pa

ges/StateofCollegeAdmission.aspx

College Board. (2015). http://professionals.collegeboard.com

CollegeBoard. (2012). *The SAT report on college & career readiness: 2012.* Retrieved

from http://media.collegeboard.com/homeOrg/content/pdf/sat-report-college-

career-readiness-2012.pdf

Geijsel, F., Sleegers, P., Leithwood, K., & Jantzi, D. (2003). Transformational leadership

effects on teacher commitment and effort toward school reform. *Journal of*

Educational Administration, 41(3), 228-256.

Gewertz, C. (2010, September 22). On SAT college-entrance exam, class of 2010 posts

few changes. *Education Week, 30*(4), 10-11.

Hallinger, P., & Heck, R. H. (1998, June). Exploring the principal's contribution to school effectiveness: 1980-1995. *School Effectiveness and School Improvement, 9*(2), 157-191.

Haycock, K., & Jerald, C. (2002, November/December). Closing the achievement gap. *Principal, 82*(2), 20-23.

Leithwood, K. (2010). Characteristics of school districts that are exceptionally effective in closing the achievement gap. *Leadership and Policy in Schools, 9*, 245-291.

Leithwood, K., & Jantzi, D. (2006, June). Transformational school leadership for large-scale reform: Effects on students, teachers, and their classroom practices. *School Effectiveness and School Improvement: An International Journal of Research, Policy and Practice, 17*(2), 201-227.

Leithwood, K., & Jantzi, D. (2008). Linking leadership to student learning: the contributions of leader efficacy. *Educational Administration Quarterly, 44*(4), 496-528.

Leithwood, K., Patten, S., & Jantzi, D. (2010). Testing a conception of how school leadership influences student learning. *Educational Administration Quarterly, 46*, 671-706.

Leithwood, K., & Sun, J. (2012, February). The nature and effects of transformational school leadership: A meta-analytic review of unpublished research. *Educational Administration Quarterly, 48*, 387-423.

Lindahl, R. A. (2011, March). The crucial role of assessing the school's climate and culture in planning for school improvement. *Educational Planning, 20*(1), 16-30.

Marzano, R. J., Waters, T., & McNulty, B. A. (2005). *School leadership that works: From research to results*. Denver, CO: Mid-Continent Research for Education and Learning.

National Association for College Admission Counseling. (2008). *Report of the commission on the use of standardized tests in undergraduate admission*. Retrieved from http://www.nacacnet.org/research/PublicationsResources/Marketplace/Documents /TestingComission_FinalReport.pdf

No Child Left Behind Act of 2001, H.R. Res. 107-110, 107th Cong., 107-110 U.S. Department of Education 1 (2001) (enacted).

Rojas-LeBouef, A., & Slate, J. R. (2012, Spring). The achievement gap between white and non-white students. *International Journal of Educational Leadership Preparation, 7*(1), 1-61.

Ross, T., Kena, G., Rathburn, A., KewalRamani, A., Zhang, J., Kristapovich, P., & Manning, E. (2012). *Higher Education: Gaps in Access and Persistence Study* (NCES - 2012-046). Retrieved from National Center for Education Statistics: http://nces.ed.gov

Schlechty, P. C. (2002). *Working on the work: An action plan for teachers, principals, and superintendents*. San Francisco, CA: Jossey-Bass.

Sergiovanni, T. J. (2004, September). Collaborative cultures & communities of practice. *Principal Leadership, 5*(1), 49-52.

Sergiovanni, T. J. (2005, Winter). The virtues of leadership. *The Educational Forum*, *69*(2), 112-123.

Taveras, B., Douwes, C., & Johnson, K. (2010, May). Using data to engage families. *Harvard Family Research Project*, 1-11.

Texas Education Agency. (2011). *Academic Excellence Indicator System, 2010-2011 Campus Profile*. Retrieved from http://ritter.tea.state.tx.us/perfreport/aeis/

Texas Education Agency. (2011). *College admissions testing of graduating seniors in Texas high schools: Class of 2010*. Retrieved from http://www.tea.state.tx.us/acctres/sat_act_index.html

Texas Education Agency. (2011). *College admissions testing of graduating seniors in Texas high schools: Class of 2010 district and campus supplement* (Document No. GE12 601 03). Retrieved from http://www.tea.state.tx.us/acctres/sat_act_index.html

Texas Education Agency. (2012). *Academic Excellence Indicator System, 2011-2012 Campus Performance*. Retrieved from http://ritter.tea.state.tx.us/perfreport/aeis/

The ACT website. (2013). http://www.actstudent.org

The Council of Chief State School Officers. (2008). *Educational leadership policy standards: ISLLC 2008   As adopted by the National Policy Board for Educational Administration*. Retrieved from http://www.ccsso.org/Documents/2008/Educational_Leadership_Policy_Standards_2008.pdf

U.S. Department of Education. (n.d.). www2.ed.gov

United States Courts. (n.d.). http://www.uscourts.gov/

Walumbwa, F. O., Lawler, J. J., Avolio, B. J., Wang, P., & Shi, K. (2005).

Transformational leadership and work related attitudes: The moderating effects of

collective and self efficacy across cultures. *Journal of Leadership and*

Organizational Studies, 11(3).

Waters, J. T., & Marzano, R. J. (2006). School district leadership that works: The effect

of superintendent leadership on student achievement. Retrieved from

http://www.mcrel.org

Appendix A

Approval from the University of Houston Human Subject Research Committee

UNIVERSITY of HOUSTON

DIVISION OF RESEARCH

October 27, 2014

Cory Colina
c/o Dr. Angus MacNeil
Dean, Education

Dear Cory Colina,

The University of Houston's Institutional Review Board Committee for the Protection of Human Subjects reviewed your research proposal entitled "Administrative Leadership Effect on College Entrance Examination Participation and Performance" on October 3, 2014, according to federal regulations and institutional policies and procedures.

At that time, your project was granted approval contingent upon your agreement to modify your protocol as stipulated by the Committee. The changes you have made adequately fulfill the requested contingencies, and your project is now **APPROVED**.

- **Approval Date: October 27, 2014**

- **Expiration Date: October 26, 2015**

As required by federal regulations governing research in human subjects, research procedures including recruitment, informed consent intervention, data collection or data analysis may not be conducted after the expiration date.

To ensure that no gaps in approval or ongoing research occurs, please ensure that your protocol is resubmitted in RAMP for renewal by the deadline for the September, 2015 CPHS meeting. Deadlines for submission are located on the CPHS website.

During the course of the research, the following must also be submitted to the CPHS:

- Any proposed changes to the approved protocol, prior to initiation, AND
- Any unanticipated events (including adverse events, injuries, or outcomes) involving possible risk to subjects or others, within 10 working days.

If you have any questions, please contact Samoya Copeland at (713) 743-9534

Sincerely yours,

Dr. Daniel O Connor, Chair
Committee for the Protection of Human Subjects (1)

PLEASE NOTE All subjects must receive a copy of the informed consent document, if one is approved for use. All research data including signed consent documents, must be retained according to the University of Houston Data Retention Policy (found on the CPHS website) as well as requirements of the FDA and external sponsors, if applicable. Faculty sponsors are responsible for retaining data for student projects on the UH campus for the required period of record retention.

Protocol Number: 14481-01   Full Review___   Expedited Review X

315 E. Cullen Building   Houston, TX 77204-2015   (713) 743-0204   Fax: (713) 743-9577

COMMITTEES FOR THE PROTECTION OF HUMAN SUBJECTS.

Appendix B

Interview Questions

Interview Questions

1) What do you do that impacts the student participation on the SAT/ACT?
2) What do you do that impacts the student performance on the SAT/ACT?
3) What external factors do you believe have made your campus more successful than others in participation on the SAT/ACT?
4) What external factors do you believe have made your campus more successful than others in performance on the SAT/ACT?
5) What campus personnel make an impact on student participation on the SAT/ACT? What do they do that makes an impact?
6) What district personnel make an impact on student participation on the SAT/ACT? What do they do?
7) What district support have you received that has impacted student participation on the SAT/ACT?
8) What district support have you received that has impacted student performance on the SAT/ACT?
9) What role do you believe the campus instruction contributes to SAT/ACT performance?
10) What funding does your campus receive to impact participation/performance on the SAT/ACT?
11) What programs/preparation courses are in place to improve the performance on the SAT/ACT?
12) How does the campus communicate with parents about the SAT/ACT?
13) How does the district communicate with parents about the SAT/ACT?
14) How does the campus communicate with students about the SAT/ACT?
15) What is done to increase the number of students taking advanced classes?
16) What goals does the district/campus have regarding student participation and performance on the SAT/ACT?
17) How does the culture of the district/campus contribute to participation and performance on SAT and ACT?
18) Share anything else that you believe impacts your student participation and performance on the SAT/ACT.
19) What actions have been taken to close the gap in student participation on SAT/ACT?
20) What actions have been taken to close the gap in student performance on SAT/ACT?