AN ANALYSIS OF TEACHER SELF-EFFICACY, TEACHER TRUST, AND COLLECTIVE EFFICACY IN A SOUTHWEST TEXAS SCHOOL DISTRICT

A Dissertation

by

JEANETTE BALL

Submitted to the Office of Graduate Studies of Texas A&M University in partial fulfillment of the requirements for the degree of

DOCTOR OF PHILOSOPHY

December 2010

Major Subject: Educational Administration
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Approved by:

Chair of Committee, John Hoyle
Committee Members, Virginia Collier
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December 2010

Major Subject: Educational Administration
ABSTRACT

An Analysis of Teacher Self-Efficacy, Teacher Trust, and Collective Efficacy in a Southwest Texas School District. (December 2010)

Jeanette Ball, B.A, Schreiner University; M.A., The University of Texas at San Antonio
Chair of Advisory Committee: Dr. John Hoyle

The purpose of the study was to investigate relationships among teacher self-efficacy, trust, and collective efficacy among teachers in a southwest Texas school district. The research included three established surveys combined to create a single survey. A multivariate analysis of variance was conducted to analyze the data from the survey.

The study analyzed the results of surveys completed by 746 teachers. The surveys completed were the Teachers’ Sense of Self-Efficacy Scale, Collective Efficacy Scale, and Omnibus T-Scale. Factors considered in the analysis of data included gender, number of years of experience, ethnicity, and the level of mentorship provided. A multivariate analysis of variance was conducted to assess if differences exist in the Teachers’ Sense of Self-Efficacy Scale subscales of student engagement, instructional strategies, classroom management, Omnibus T-Scale subscale of trust in principal, trust in colleagues, trust in clients, and collective efficacy between schools. The results suggest that simultaneous differences exist in dependent variables between schools.
However, further analysis also showed all schools with the exception of one scored higher than 84% of the standardized school sample in trust in students’ ability to perform. In comparing survey responses across teacher demographics, results showed gender differences in trust in principal, trust in clients, and collective efficacy. When comparing the responses to national averages, the results were as follows: self-efficacy showed patterns that were below average, trust showed patterns that were above average, and collective efficacy was average.

This research study contributes to the theoretical rationale explaining the relationship between self-efficacy, collective efficacy, and trust. Further research could be done in the area for school administrators to improve student achievement through working to raise collective efficacy beliefs and trust of their faculty.
DEDICATION

This dissertation is dedicated to my loving, understanding, and supportive family. This dream could not have become a reality with their love and encouragement. This project is for them as much as it is for me.

- To my husband, Jose Reyes, for the unending support and encouragement. I could not have done this without you. You make me want to be a better person. For all you have done to allow me to pursue my dream, I say, “You are my everything!”

- To my parents, Frank and Mary Ball, for providing the love and support through my life. I thank both of you for the encouragement and support.

- To my sisters, Eliza Diaz, Francine Pina, Julie Ricks, for always being there as cheerleaders for me! Your support meant so much to me. Love you!
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I truly appreciate the support of many family members and friends for the encouragement and undoubting faith that this would get done. For many of my friends who continually asked about my progress along the way, thanks to each of you!
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CHAPTER I

INTRODUCTION

Background of the Study

There are many challenges facing education today. Fideler and Haselkorn (1999) indicate the biggest challenge will be the number of teacher vacancies needing to be filled. It is estimated that over the next ten years, approximately 200,000 new teachers will need to enter the field to meet the demands of the educational system in the United States (Fideler & Haselkorn, 1999). Some of the factors that are creating this great need include: (a) increasing school enrollments, (b) attempts to reduce teacher-to-student ratios, and (c) an alarmingly high increase in teacher attrition and retirement rates (Cortez, 2001). Between 1997 and 2009, the enrollment in public schools is projected to increase by 4% to 48.1 million (Olson, 2000). The average age of a teacher in America today is 44 years (Olson, 2000). According to Olson, districts are anticipating high rates of retirement in the near future as a result of this increasingly high average age.

The teacher demand in Texas is particularly alarming. The Texas State Board for Educator Certification (TSBEC) indicated in 1998 that Texas had a 44,000 teacher shortage at the start of the school year (Huling, 1998). It is difficult to discuss teacher recruitment without considering issues of the supply and demand. How many teachers are needed for the nation’s classrooms and where they will come from are questions that are closely related. Additionally, the issue of teacher quality is inextricably linked to recruitment, for in recruiting teachers, we wish to attract individuals who are well-
prepared, effective, and who will remain in the teaching profession long enough to make a difference.

In the 1980s and 1990s, there was little or no shortage of teachers available to fill open positions at the national level; in fact, the supply of teachers exceeded demand (Boe & Gilford, 1991; Rollefson, 1992). Several prominent researchers predicted that in the 1980s and 1990s, a shortfall in the teaching force would take place. It did not materialize due to lower than anticipated attrition rates, slower retirement rates, and other factors. Early in the 1980s, attrition rates for public school teachers were estimated to be at 8% but were in actuality much lower. For example, the annual teacher attrition from 1987-1988 to 1988-1989 was 5.6% for the nation (Whitener et al., 1997). In the 1990s, the average age of the teaching force had been gradually increasing, as more teachers were retiring at a later age. This slower retirement rate had, in addition to other factors, slowed the demand for new teachers. As a consequence, the National Research Council predicted that large numbers of teachers would retire during the decade of 2000-2010 rather than during the 1990s (Boe & Gilford, 1991). This was a deceiving prediction. Not only should retirement have been a concern, but also teachers leaving the profession and transferring from their present teaching positions to other educational institutions. Both are very costly to the institution they leave.

A conservative national estimate of the cost of replacing public school teachers who have dropped out of the profession is $2.2 billion a year (U.S. Department of Education, 2002). If, in addition, the cost of replacing public school teachers who transfer schools is added, this total reaches $4.9 billion every year. For different
individual states, various cost estimates range from $8.5 million in North Dakota to an overwhelming half a billion dollars for a large state like Texas. “Using the most conservative turnover cost estimation method, Texas is losing approximately $329 million year due to teacher turnover with alternate estimations for the costs reaching as high as $2.1 billion per year” (Texas State Board for Educator Certification [TSBEC], 2000, p. 22). Specifically, teachers leaving the profession in Texas cost $19,034 per institution they leave, for a total of $214,509,448 for the cost to the state of Texas. In addition, teachers transferring to other schools cost institutions $1,426, and $504,917,385 in total turnover cost in Texas statewide (National Center for Education Statistics [NCES], 2003). Looking strictly at retirement numbers, masks a deeper seeded problem.

The total figures on teacher supply and demand masked problems of distribution and composition in the teaching force and, thus, were highlighted by the disaggregated data. A good example was the identified shortages of teachers in certain areas, such as poor, urban, and high minority enrollment schools (Eubanks, 1996; Ingersoll & Bobbitt, 1995) and in subjects such as mathematics and science (Carnegie Forum on Education and the Economy, 1986; Gilford & Tennenbaum, 1990) and in teaching fields such as bilingual and special education (Schmidt, 1992).

A more recent example is found in Texas school districts that have been confronted with critical shortages of math and science teachers as college students specializing in math and science areas lean toward careers in the higher paying businesses and private technology sector. Almost a quarter of the math and science
classes in Texas middle and high schools are taught by teachers without proper credentials. In 2006, 14.3% of math teachers, 28% of science teachers, and 52.2% of computer science teachers have been teaching out-of-field in Texas classrooms (Terry, 2007). Mathematics and science have been designated as subject matter teacher shortage areas by the Texas Education Agency for the 2006-2007 school years. Accordingly, a revised target in teacher education success in Closing the Gaps by 2015, the Texas Higher Education Coordinating Board’s (THECB, 2000) Texas higher education plan, is to significantly increase the number of math and science teachers certified through all teacher certification routes by 2015. There were and are today several reasons for these shortages. The reasons range from higher turnover rates and reluctance of teachers to take jobs in poor, inner city schools to low numbers of teachers being produced in specific specialty areas (Adams & Dial, 1993; Ingersoll, 1999; Jones & Sandidge, 1997; Terry, 2007).

Added to the complex issue of teacher supply and demand is the issue of the demographic composition of the teaching pool. Previously, it was reported that the great majority of teachers came from the lower middle class, were female and white, while their students had become increasingly diverse (Zimpher, 1989). In fact, the U.S. Department of Commerce (1996) predicted that by the year 2035, students of color in K-12 classrooms would constitute a numerical majority of all students. Research into how teachers’ demographic characteristics influence student achievement was inconclusive (Ehrenberg & Brewer, 1994; Ehrenberg, Goldhaber, & Brewer, 1995). Many supporters of diversifying the teaching force had presented compelling arguments in favor of
increasing the number of male teachers and teachers of color (Clewell & Villegas, 1998). According to Boe and Gilford (1991), the problem of teacher shortages, viewed from a different perspective, could be seen in terms of inadequacies in the qualifications and characteristics of the teaching force rather than in its absolute size in relation to gross demand. The complexity of the issue becomes greater when considering the issue of attrition and retention of teachers.

Nieto (2003) has addressed the teacher attrition issue from a very different angle. Instead of looking at teacher attrition and why teachers leave, she looked at why teachers stay in their positions. Nieto conducted research with veteran teachers from high schools in the Boston, Massachusetts, area and identified characteristics that “keep teachers going” (p. 6). She was able to identify the characteristics such as love, hope and possibility, anger and desperation, intellectual work, and the belief in the ability to shape the future and how they influenced the teachers’ decision to stay put. There are other studies that support the same findings when looking at the intrinsic factors that shape a teacher’s decision to not only remain in the teaching profession but stay in their present school setting (Johnson, Berg, & Donaldson, 2005; Waddell, 2007). Teachers’ job satisfaction is thus derived from their sense of competence and self-efficacy.

Ultimately, teachers’ self-efficacy is closely related to teacher job satisfaction and is directly related to teacher intrinsic needs of competence and knowledge in their area of expertise (Ryan & Deci, 2000). Indirectly, teachers’ sense of self-efficacy is conducive to performance as teachers may derive pride and rewards from their job performance. Previous research has also found that teachers’ sense of efficacy is related
to their job satisfaction, with their choice of profession and their competence, as rated by school superintendents (Trentham, Silvern, & Brogdon, 1985). Moreover, recent findings have shown that teachers’ self-efficacy beliefs have a vital role in affecting and sustaining teacher commitment to their school and their job satisfaction (Caprara, Barbaranelli, Borgogni, Petitta, & Rubinacci, 2003; Caprara, Barbaranelli, Borgogni, & Steca, 2003). Self-efficacy does not only affect teachers but the entire school organizational system.

Through a review of the literature, researchers have identified that self-efficacy, trust, and collective efficacy impact the school organizational system. Bandura (1997) took the leading role in this research. Bandura’s findings provided evidence that a teacher’s belief about his or her potential and capability to reach students was significantly related to the success of the students. Further studies indicated that organizations that were composed of teachers with high levels of efficacy then created an organization with collective efficacy, belief in the group’s capability to organize and execute a course of action required to increase effective productivity (Bandura, 1997).

Deming (1986) theorized that organizations were empowered with effectiveness when self-efficacy, trust, and collective efficacy were orchestrated within the organization. Wong and Wong (1991) describe an efficient teacher (effective, productive, high self-efficacy) as one who exhibits: (a) high expectations for student achievement, (b) excellent classroom management, and (c) the ability to incorporate great depth in their lessons to attain student mastery. The three items described above are
more easily achieved when the three components (self-efficacy, trust, and collective efficacy) are in place in the organization.

Rotter (1966) considered teachers’ ability to be in command of their actions and beliefs was strongly related to students’ achievement and motivation. As a result of administering a 30-item Likert Scale of Efficacy, Gibson and Dembo (1984) concluded: (a) a teacher’s perception of efficacy is related to the belief that the teacher encompassed the skills necessary to achieve student learning, and (b) teachers’ sense of efficacy influences “certain patterns of classroom behavior known to yield achievement gains” (pp. 573-574).

Goddard’s (2003) research continues to clarify the progress in analyzing an explanation for the positive link between efficacy and student achievement. Recent studies indicate efficacy (teachers sharing a strong collective belief, in the workplace) becomes a powerful contributor to influencing teacher performance and ultimately student achievement (Bandura, 1993; Goddard, Hoy, & Woolfolk Hoy, 2000; Goddard & Goddard, 2001a; Hoy, Sweetland, & Smith, 2002).

Researchers have found teachers have greater job satisfaction when they believe they can teach and make positive impacts on their students (Hoy & Miskel, 2001). In a targeted study on school reform, Bryk and Schneider (2002) stated, when trust permeated through an institution, then the day-to-day function becomes a critical resource and the system can facilitate significant improvement plans. Thus, the educational researchers relate a common theme: namely, the importance of trust at all levels of an organization and have concluded that trust is complex and sometimes a
dynamic contribution influencing human relationships and behavior that can shape collective performance (Adams, 2008).

As indicated in the research, trust is a pivotal construct and needs to be researched with a greater focus and thoughtful consideration of interactions with other variables we know are affected by it. We also need to consider the interactions of trust with various dimensions of educational reform and evaluation. Hoy, Hoy, and Davis (2009) go on to say that there is a triadic relationship between collective efficacy and trust and teacher self-efficacy.

Statement of the Problem

Classroom teachers face an overwhelming workload and responsibilities. Teacher workloads and job responsibilities have been recognized and studied for decades. In Texas, as well as other states in the U.S., the teacher’s workload includes: (a) instructional planning, (b) managing student behavior, (c) interacting with other teachers and administrators professionally, and (d) ensuring that programs produce students who can pass Texas state-required proficiency tests to graduate. The teacher’s workload has continued to an increase in both complexity and accountability. There are several additional stressors teachers encounter on a regular basis such as: (a) meeting with parents, (b) writing new curriculum, (c) grading and evaluating students, and (d) meeting administrative paperwork requirements. All of the aforementioned teacher expectations can produce a great amount of stressful situations for the classroom teacher.

Thus, the workload of teachers can lead to burnout, if they are unable to develop their sense of self-efficacy through consistent professional growth and development.
Burnout is described as a three-fold syndrome that includes (a) feelings of emotional exhaustion, (b) depersonalization, and (c) lack of personal accomplishment in response to chronic stress in job situations where individuals work with people (Kokkinos, as cited in Maslach, Jackson, & Leiter, 1996). According to Yong and Yue (2007), teachers’ stress and burnout affect the schools’ overall climate, promote lower morale, inhibit the achievement of educational objectives, and promote flight from the teachers’ workplace. Both the individual and the school organization are affected by stress and burnout. The ultimate conflict between the teachers’ expectations and the actual teacher workplace reality is the main contributor to teacher stress and burnout (Yong & Yue, 2007). The effect of long-term stress and anxiety lead to depletion of teachers’ enthusiasm, lowers their physical fitness, affects their mental health, and results in work burnout (Schaufeli, Maslach, & Markek, as cited in Yong & Yue, 2007).

As a result, measurement of teacher self-efficacy, trust, and collective efficacy (academic optimism) is necessary in order for administrators to identify and gauge job satisfaction and teachers’ perceptions of their ability to reach and teach students and increase their academic achievement. A bi-product may be the reflection of the campus leadership and the resulting collective efficacy at campuses in the district where this study takes place. As Hoyle (2007) said, in his study of district leadership, describing two district administrators who were subjects of his study: “However, the key was in their individual leadership styles and how to observe, reflect, and act on the interpersonal politics with staff, school board, and community” (p. 160). Thus, the leader’s self-efficacy may also play a role in teacher’s self-efficacy by association.
Purpose of the Study

The purpose of this study was to examine the variables attributed to teacher self-efficacy, trust, and teacher collective efficacy. This study was a one-case study, with implications for one urban fringe school district in San Antonio, Texas. Case studies make sense in development where the intention is about understanding a specific situation in order to make or adjust policy or practice. In this particular case, the purpose was to research teacher efficacy, trust, and collective efficacy as it applied to the district and individual campuses in order to inform practice for adopting/implementing mentoring programming and development/retention of novice or experienced teachers in this particular urban fringe school district in the San Antonio, Texas area.

Research Questions

The following questions were addressed in the study:

1. What are the scores for each campus on the following surveys: Teachers’ Sense of Efficacy Scale (TSES), Collective Efficacy Scale (CE-Scale), and Omnibus T-Scale (OTS), and are there any differences among campus scores?

2. What are the demographic differences of teachers’ sense of self-efficacy, collective efficacy, and trust beliefs?

3. Do teachers’ self-efficacy, collective efficacy, and trust beliefs remain constant for every campus?
Operational Definitions

*Collective Efficacy*: The general belief about the power of teaching to reach difficult children (Hoy, 2000).

*Teacher Retention*: A teacher who is a teacher of record in the fall of year one and is still employed as a teacher of record in the fall three years later (this term is used in the teacher demographics as to how many years the teacher has been teaching in the district – if there are a high percentage of teachers who do not stay in the district for at least one to three years, the retention rate could be high).

*Teacher Self-Efficacy*: Teachers’ confidence in their ability to promote students’ learning (Hoy, 2000).


*Teachers’ Sense of Efficacy Scale (TSES)*: Scale to measure teachers’ sense of self-efficacy (their confidence in their ability to promote student learning) (Tschannen-Moran & Woolfolk Hoy, 2001).

*Omnibus T-Scale*: Short operational measure of the three dimensions of trust (Hoy & Tschannen-Moran, 2003).

*Collective Efficacy Scale (CE-Scale)*: Shared perceptions of teachers in a school that the efforts of the faculty as a whole will have positive effects on students (Goddard, Hoy, & Woolfolk Hoy, 2000; Goddard, Tschannen-Moran, & Hoy, 2001a).
Assumptions

1. All three survey instruments were administered to the 714 identified teachers (both novice and veteran) at each of the 13 campuses (9 elementary schools, 3 middle schools, and 1 high school) in an urban fringe district of San Antonio, Texas. It was assumed most teachers would participate in the survey.

2. It was assumed the response to the survey by teachers was a reflection of: (a) Teachers’ Sense of Efficacy Scale (TSES), which measures efficacy in student engagement, instructional practices, and classroom management; (b) Omnibus T-Scale (OTS), which measures teacher trust; and (c) Collective Efficacy Scale (CE-Scale), which measures collective efficacy.

3. It was assumed the methodology proposed and detailed in the instrumentation and design followed a logical probe into: TSES (teacher self-efficacy); Omnibus T-Scale (teacher trust); CE-Scale (teacher collective efficacy).

4. It was assumed the results of the survey would inform administration at the campus and district level as to the levels of teacher self-efficacy, teacher trust, and teacher collective efficacy at each campus.

5. It was assumed the results from the survey analysis would inform administration at the campus and district level as to the needs for professional development of experienced and novice teachers’ instructional skills and possible professional development for a more positive campus environment,
thus leading to better instruction by teachers, greater collective campus confidence, and improved student academic outcomes.

6. It was assumed the data from the study will be used for future longitudinal studies of the same Fall 2009 teacher cohorts to measure improvement over time.

**Limitations**

1. The study was limited to the information acquired and attained from the literature review, teacher demographics, and teacher surveys.

2. The findings were generalized and specific to one school district and one cohort group of teachers (Spring 2010) in an urban fringe school district in San Antonio, Texas (13 campuses; 9 elementary schools; 3 middle schools, and 1 high school).

**Significance of the Study**

This study contributes to the research foundation of: (a) teacher self-efficacy (Hoy & Woolfolk, 1993); (b) teacher/faculty trust (Hoy & Woolfolk); and (c) collective self-efficacy (Bandura, 1997). This study contributes to the research foundation through incorporating the following: to determine the relationships among teacher self-efficacy, collective efficacy, and faculty trust scale items (dependent variables), with the independent variables (teacher demographics and other teacher characteristics). Thus, the significance of demographics compared to academic setting (campus) and the dependent variables included the three surveys was determined.
The significance of the study is embodied in the new measurement of the significant difference (if they were found) on demographics (independent variables) and survey variables (dependent variables). Thus, the structure of the analysis is a new analytical view of the relationship of demographics and survey variables and leads to a different structure of analysis. Descriptive and general linear models were utilized to analyze quantitative data from surveys of: (a) teacher self-efficacy, (b) collective efficacy, and (c) faculty trust. Teachers from 13 campuses in an urban fringe district in San Antonio, Texas participated in the survey. This study provided an opportunity to describe how the constructs of teacher self-efficacy, collective efficacy, and faculty trust can be correlated to teacher demographics and how they are also possibly linked to student achievement, in particular school settings in an urban fringe school district, in San Antonio, Texas. This study revealed possible correlates but was not causal in nature.

As a result, a possible new model for evaluating professional development needs of teachers at campuses in this particular urban fringe school district in San Antonio, Texas, was generated. In so doing, the study will help to inform district and campus administrators on how to better serve campuses with particular needs identified in the areas of teacher self-efficacy, collective efficacy, and teacher/faculty trust. Although these surveys have been administered individually before, this study was unique in incorporating all three surveys. This study, therefore, investigated the possible correlations there are with teacher self-efficacy, trust, and collective efficacy variables and teacher demographics by campus in an urban fringe school district in San Antonio, Texas.
Organization of the Dissertation

This dissertation is divided into five major chapters. Chapter I contains an introduction, statement of the problem, purpose of the study, operational definitions, assumptions and limitations, and the significance of the study. A review of the literature is found in Chapter II. In Chapter III, the research methodology employed is described, including: the population, instrumentation, procedures, and data analysis. Chapter IV contains the analysis and comparisons of the data collected in the study. Finally, in Chapter V, the researcher provides a summary of the findings of the study and conclusions and implications from those findings. Recommendations are made for future practices to address identified deficient practices and to strengthen positive practices already in place. Recommendations for future research are addressed in this chapter as well.
Chapter II is a critical analysis and review of literature that supports the study of the impact of teachers’ self-efficacy, teacher trust, and collective efficacy. Researchers have found teachers have greater job satisfaction when they believe they can teach and make positive impacts on their students (Hoy & Miskel, 2001). Thus, teachers’ sense of self-efficacy, trust, and collective efficacy have a profound effect on their job satisfaction and success of their students. The research literature, in this chapter, is organized in the following categories: (a) teacher self-efficacy, (b) teacher trust, and (c) collective efficacy. The literature reviewed provides a conceptual framework that will provide an explanation of how the categories contribute to the success of teachers in their complex working classrooms.

**Teacher Self-Efficacy**

Teacher self-efficacy is: “teachers’ confidence in the ability to promote students’ learning” (Hoy, 2000). Teacher self-efficacy is an integral part of the success that a teacher will have in the areas of instructional, classroom management and efficacy for student engagement. There is a developed belief in the association between teacher self-efficacy and high student achievement and the implementation of positive instructional techniques. Bandura (1997) proposed that because self-efficacy beliefs were clearly guided by a teacher’s own inner nature and directed toward perceived abilities given specific tasks, they were powerful predictors of behavior. There are a number of factors that many would say contribute to the effectiveness of a teacher such as: (a) planning,
(b) organization, (c) content knowledge, and (d) previous experience. But none of these factors impact student success as much as teacher self-efficacy. The evidence supports the ideas that teachers who leave teaching have lower teacher self-efficacy scores than those who remain in teaching (Burley, Hall, Villeme, & Brockmeier, 1991; Glickman & Tamashiro, 1982). Gregoire (2003) suggests that even when teachers understand that a given method may be more effective, their efficacy beliefs for enacting the new method will drive their implementation decisions.

An individual’s belief in oneself to make a difference increases the chances of actually turning the belief into action. What we come to believe about our product is what we will produce. In the eyes of teachers, how much they believe that they will make a positive difference will be evident in the success of their students. If teachers are to have high-achieving students, then it is necessary for teachers to have high achieving goals for themselves. The journey to teach students must begin first with the teacher’s journey in believing that he or she can fulfill the obligation (teacher self-efficacy). Students of efficacious teachers generally have outperformed students in other classes. Teacher efficacy was predictive of achievement on the Iowa Test of Basic Skills (Moore & Esselman, 1992), The Canadian Achievement Tests (Anderson, Green, & Loewen, 1988), and the Ontario Assessment Instrument Pool (Ross, 1992). Regarding teacher behavior, efficacious teachers persist with struggling students and criticize less after incorrect student answers (Gibson & Dembo, 1984). When you have teachers with a high sense of teacher self-efficacy, it will be evident in their motivation and desire to work with students; they may struggle through the difficulties that are inevitable, but
they continue to facilitate learning and move forward even with the most difficult and unmotivated learner. Bandura (1986) noted, “self development of efficacy requires mastering knowledge and skills attainable only though long hours of arduous work. This often necessitates the sacrifice of many immediate gratifications” (p. 448). Therefore, it would stand to reason novice and experienced teachers’ self-efficacy beliefs would be correlated with their motivation and goals and belief in their ability to reach and teach students.

In his review of research, Jerald (2007) highlights some teachers’ behaviors found to be related to a teacher’s sense of efficacy. Teachers with a stronger sense of efficacy:

Teach to exhibit greater levels of planning and organization; are more open to new ideas and are more willing to experiment with new methods to better meet the needs of their students; are more persistent and resilient when things do not go smoothly; are less critical of students when they make errors and are less inclined to refer a difficult student to special education. (p. 33)

A teacher who exhibits these behaviors according to Jerald (2007), is going to positively impact student learning. When a teacher has high-achieving goals for him or herself, those goals are transmitted to the student.

However, it is not the expectation of a teacher with higher self-efficacy to have his or her students reach these milestones on their own, but rather through the impact of the teacher’s behavior to include effective lesson planning, classroom management, and instructional methodologies. Teachers who set high goals, who persist, who try another strategy when one approach is found wanting – in other words, teachers who have a high sense of efficacy and act on it – are more likely to have students who learn
Through teacher self-efficacy, teachers have a sense that they have control of the situation. They are responsible for making a difference in the lives of the children they teach.

The study of teacher efficacy is also evidenced through the Rand researchers’ evaluation of whether teachers believe they could control the reinforcement of their actions (Armor et al., 1976). In this 1976 Rand Corporation study, it was acknowledged that teachers who agreed with the statement, “If I try really hard, I can get through to even the most difficult or unmotivated students” (Armor et al., 1976, p. 23) indicated confidence in their abilities as teachers to overcome factors that could make learning difficult for a student. Many researchers have connected this facet of efficacy to teachers’ past personal experiences either with their own personal success or previous success with students. So, it is critical that as we analyze the effect of teacher self-efficacy, that we take into account the development of self-efficacy in a teacher, because research will show that just as self-efficacy can contribute to a high level of student achievement, lack of or lower self-efficacy will have the adverse effect.

An important finding from earlier studies indicated that teachers at risk for burnout viewed their work as unimportant and was the polar opposite of what they had hoped and planned for in their early careers (Bullough & Baughman, 1997). Matheny, Gfroerer, and Harris (2000) noted that earlier research into the phenomenon described burnout as a loss of idealism and enthusiasm for work. Freudenberger (1974), a psychiatrist, is largely credited with first using the term. Maslach and Jackson refined the meaning and measurement of the burnout construct in the 1980s (Maslach & Jackson,
1981; Maslach & Schaufeli, 1993) to include three sub-domains: (a) depersonalization, in which one distances oneself from others and views others impersonally; (b) reduced personal accomplishment, in which one devalues one’s work with others; and (c) emotional exhaustion, in which one feels emptied of personal emotional resources and becomes highly vulnerable to stressors. In particular, depersonalization may be expressed through poor attitudes toward students and the work environment. Thus, low teacher self-efficacy can have devastating results over time for both students and the teachers themselves.

In a review written by Burley et al. (1991), the researchers noted that few studies had been conducted on the development of self-efficacy with novice teachers. However, new teachers who were confident and were developing that sense of self-efficacy had a greater satisfaction in teaching attributed to their confidence from the support they received during their first year. Efficacious beginning teachers indicated greater optimism that they would remain in the field of teaching (Burley et al., 1991; Hall, Burley, Villeme, & Brockmeier, 1992). It is imperative that when addressing the needs of novice teachers, time be spent on ensuring the teacher’s experience is positive. A teacher’s sense of self-efficacy is not easy to turn around. Once a teacher’s self-efficacy has been established, and a teacher’s belief system has been set, they become resistant to change. Changes in efficacy beliefs are more difficult to produce and sustain. In a study conducted by Ross in 1994, it was concluded that even when teachers are exposed to workshops and new teaching methods, the experienced teachers’ efficacy beliefs are stable.
Therefore, it is not surprising, the greater teacher effort, student motivation, higher levels of student success and teacher confidence and retention, the greater the teacher’s self-efficacy. Student success is affected in a positive manner when strong and stable teacher self-efficacy is evident. Researchers have found teachers have greater job satisfaction when they believe they can teach and make positive impacts on their students (Hoy & Miskel, 2001). It would then make sense, the greater the sense of self-efficacy, the more teachers can maintain motivation and commitment to self-regulation and the stronger their academic performance will be. Although simple in concept, teacher self-efficacy is formed by many different constructs.

The educational workplace that a teacher faces on a daily basis can be one filled with challenges and difficulties. Teachers must deal with a multitude of complex issues. They must come face-to-face with the task of meeting the needs of their students. This task can be overwhelming; however, self-efficacy can make this daunting task manageable and attainable. Pajares (2002) in his research, “Overview of Social Cognitive Theory and of Self-efficacy” states:

Teachers have the challenge of improving the academic learning and confidence of the students in their charge. Using the social cognitive theory as a framework, teachers can work to improve their students’ emotional states and to correct their faulty self-beliefs and habits of thinking, improve their academic skills and self-regulatory practices behaviors, and alter the school and classroom structures that may work to undermine student success. (p. 2)

Again, teacher self-efficacy, the belief a teacher can make a difference, is vital for student success in the classroom. Teachers must have a strong judgment of their capabilities and their ability to plan, implement, motivate, and execute student achievement. Self-efficacy beliefs provide the foundation for human motivation, well-
being, and personal accomplishments (Pajares, 1996). Teachers must feel motivated to rise to the challenge of teaching. Prince (1988) suggested that stress results when the demands of a situation are perceived to be greater than one’s capabilities to meet those demands. Confidence is the key. But how can we go about building this confidence so that teachers are not ill equipped to ensure positive academic outcomes and so they will be prepared to teach effectively?

Research proves that building self-efficacy can be done through personal and professional development for teaching staffs as well as effective mentoring programs for novice teachers. In this regard, Tschannen-Moran and Woolfolk Hoy (2001) observed, “teachers sense of efficacy is an idea that neither researchers not practitioners can afford to ignore “ (p. 803). Beginning teachers appreciate an induction program that provides support and guidance in their critical first year and sometime through first three years of their teaching career. It is during these four years that the positive self-efficacy teachers begin with will be engrained or that a teacher with lack of self-efficacy can develop it. In article entitled, “Speaking Up and Speaking Freely: Beginning Teachers’ Critical Perceptions of Their Professional Induction,” Cherubini (2007) wrote:

Beginning teachers reported that their confidence emanated from what one individual called “reflections on teaching and dealing with the big picture of schooling outside the classroom wall.” Although statements describing the challenges associated with teaching were not rare, they were consistently couched in rhetoric that suggested teachers’ proficiencies to mediate the experiences described as “confidence in both our professional and personal life.” Participation in this program has affirmed that I am confident in what I do and now I feel like this profession is actually manageable and enjoyable. (p. 6)

A program such as the one described above is an example of developing and heightening teacher self-efficacy in order to be able to make a profound difference in the lives of
children on a daily basis. The idea that teachers’ self-beliefs are determinants of teaching behavior is a simple, yet powerful idea (Henson, 2001b).

With confidence it can be stated that teacher self-efficacy plays a role not only in student success but teacher success as well; and if there is a correlation with teacher self-efficacy and student success, then it also impacts teacher retention. Teachers who feel confident and sure of themselves as described in Cherubini’s study are more likely to want to continue in the profession if they feel it is “manageable and enjoyable.” Districts and campus leaders who establish and promote the teacher induction programs will ensure that teachers feel confident and comfortable, and therefore, teachers will instill this feeling in their students thus creating a positive, successful learning environment with a teacher who will lead her current and future students into the best possible tomorrow.

Hoy (2000) presented other factors that influence a teacher’s sense of efficacy. First, vicarious experiences play a role. For example, a teacher might observe another teacher using a particularly effective practice and thus feel more confident that, through its use, they could be more successful in reaching their students. Secondly, social persuasion plays a role. In a school setting, this could take the form of either pep talks or feedback that highlights effective teaching behaviors, while providing constructive and specific suggestions for ways to improve. However, such “persuasion” is likely to lose its positive impact if subsequent teachers’ experiences are not positive.

Thus, the power of self-efficacy is evident. According to Hoy, Hoy, and Davis (2009), “greater efficacy leads to greater effort and persistence, which leads to better
performance, which, in turn leads to greater efficacy” (p. 629). According to Bandura (1997), people’s level of motivation is based on what they believe than on what is objectively true. Consequently, it is imperative schools and school districts understand the importance of developing teacher self-efficacy.

When districts and leaders act on the research of self-efficacy, they are making a commitment to assist in the development of confidence and inspiring teachers to remain in the profession. Given the current and potential educational value of the teacher efficacy construct, efforts to impact changes in teacher efficacy would be valuable in moving teacher efficacy research beyond the realm of correlational designs (Henson, 2001b). The opportunity for teachers to critically examine themselves, reflect on their beliefs and receive feedback concerning their effectiveness will assist in solidifying self-efficacy that will promote learning and retention. But, research shows that these opportunities must be conducted early on in their careers because as a teacher moves through his or her career, the teachers’ efficacy beliefs set in and are more challenging to redesign. Henson (2001b) states, “positively impacting teachers’ efficacy beliefs is unlikely outside of longer term professional development that compels teachers to think critically about their classrooms and behave actively in instructional improvement” (p. 8). The development of teacher self-efficacy is significant; there are a number of factors that contribute to teacher self-efficacy and there are a number of components that self-efficacy influences. The multidimensional model of teacher efficacy from “Teacher Efficacy: Its Meaning and Measures” by Tschannen-Moran, Woolfolk Hoy, and Hoy
(1998), shows teacher self-efficacy as a cyclical process that will impact performance of the student and teacher.

The model, presented in Figure 2.1, represents an important advancement in the area of (self-efficacy) and may guide future research efforts (Henson, 2001a). Teacher efficacy although it may seem a simple concept, is complex, as it relates to teacher success, student achievement, and teacher retention.

**Note.** Reprinted by permission from Hoy (2000).

**Figure 2.1.** Model of Teacher Self-Efficacy.

Self-efficacy is a powerful tool that will allow teachers to create instructional lessons and implement learning activities that will empower students. Through the self-efficacy of school personnel, children are educated and nurtured as a whole child and not
just intellect. Schools can assist students in knowledge and skills, but also with the developing their inner strength. Losee (2000) summarized:

The value of Self-efficacy Theory is realized from the guidelines that people can influence their own lives and enhance human efficacy. She states that self-efficacy can be learned and it should be facilitated by the school leaders. The ingredients for self-efficacy that school leaders must develop fall into three categories of skills: Focus, Flow and Follow-through. These three skills enable aikido masters to blend with the energies within and around them. School leaders must be ready for transformation and change. In the quickly changing world around us, it is imperative we not only develop and teach skills but that our focus is on self-efficacy for all people within the school organization, leaders, staff and students. Self-efficacy can be the catalyst to an explosion of empowerment and be the tool to create more than mere students, teachers or leaders but greatness. (p. 6)

As conceptualized by Bandura (1997), self-efficacy is a bridge between cognition and behavior that correlates to the amount of energy and effort that will be expended toward the completion of a task with a particular outcome. Research in psychology suggests that high self-efficacy beliefs enhance motivation (Bandura & Cervone, 1983), encourage superior goal-setting behaviors, increase dedication and persistence, and refine the commitment to goal accomplishment (Locke & Latham, 1990). With self-efficacy evident in leaders, teachers, and students, the overall effectiveness of the school will rise to the top.

**Teacher Trust**

In the book, *The Trust Factor*, Deming (as cited in Whitney, 1993) stated, “trust is mandatory for optimization of a system. Without trust, there cannot be cooperation between people, teams, departments, or divisions” (p. viii). A review of the literature suggests that the word trust can have a multitude of implications; however, in the schema of teacher trust, it is being identified as a teacher who trusts in herself, in the
students, and in those that surround her complex world. It is a feeling that must be evident if high-achieving student goals are to be attained. Philosopher Trudy Govier (1998) says that “trust is an attitude based on beliefs and values and typically involving feelings and implying behavior” (p. 18). The school system is a multifaceted organization; and as it is with any organization, there must be a sense of working together toward a common goal. As Covey (1992) states, if there is little or no trust, there is no opportunity to build permanent success. Covey (1989) also argues that “trust is the highest form of human motivation. It brings out the best in people but takes time and patience to develop” (p. 178). Trust within the organization is the pillar of the success of the organization. Trust is embedded in relationships throughout the school organization.

Lewicki and Bunker (1996) express that the central component to a relationship is trust. They refer to trust as “the glue that holds most cooperative relationships” (p. 129). Theorists have not always looked at trust as an element that would have an effect on an organization; but in the 1990s, that all began to change. Trust became an essential concept in the realm and language of school communities. Levin (1999) explained that “the confidence felt by employees represents the affective element of trust and belief in what management says represents the cognitive element of trust” (p. 42).

As evident in the study done by Bryk and Schneider (2002), trust does have a direct correlation with student achievement. In Chicago, more than 400 elementary schools were studied. It was found that a school with a low score in the area of trust had only a 1 in 7 chance of demonstrating improved academic productivity, in contrast to a
school with high levels of trust where student achievements levels were significantly higher and showed steady improvement. The improving schools were the schools where a strong sense of trust was demonstrated. In these schools, increases in reading and math scores varied from 8% to 20% in a five-year period. However, when trust was lacking, there was little evidence that math or reading scores improved. Thus, all members of the organization must play a vital role in the upkeep of the system; it is crucial that they feel important. Research shows trust in the workplace will lead to efforts from the teachers and all others involved in the organization to act in accordance to the commitment of the vision.

The obligation to foster that feeling of importance and trust falls on the workplace, in this case the learning environment of schools. A collaborative effort to profess trust as a basic tenet of their organization must be embedded. In their extensive study of school reform, Bryk and Schneider (2002) conclude that school leaders need a strong base of trust in order to accomplish many of the day-to-day functions but especially to successfully complete improvement plans. Trust and its associated terms (believe in; have confidence in; have faith in; set store by, etc.), have often been used by researchers in the field of educational leadership as something necessary and vital. There are a number of contributing factors that can be attributed to the success of a teacher, school, or district, but one that cannot be overlooked is teacher trust.

Teacher trust is a school-wide commitment to a shared vision, an effective process for making collaborative decisions and solving problems and school leadership that consistently supports teachers (Geist & Hoy, 2004; Goddard, Tschannen-Moran, &
Hoy, 2001b; Hoy, 2002; Hoy & Miskel, 2008; Hoy & Tschannen-Moran, 1999; Tschannen-Moran & Hoy, 2000). When there is teacher trust, there is a confidence and willingness toward the organization and a belief in the organization that “the latter party is benevolent, reliable, competent, honest and open” (Hoy & Miskel, 2008, p. 18).

Studies have shown that trust can transform a mediocre school organization into a high achieving successful institute. But how can trust be established? The Center for Teaching Quality published an article entitled, “Creating an Atmosphere of Trust – Lessons from an Exemplary School,” and listed factors and practices that can be evident in a school system. From the working condition’s data, we know that factors most strongly associated with trust include:

1. a school-wide commitment to a shared vision
2. an effective process for making collaborative decisions and solving problems;
   and
3. school leadership that consistently supports teachers (Reeves, Emerick, & Hirsch, 2007).

High-achieving schools realize the contributions that are made when teachers and administrators collaborate to develop trust in a school environment.

Difficulty lies in the establishment of trust and mutual respect because it is not an overnight process but rather a lifelong commitment. Administrators must adhere to fostering trust by having open lines of communication, being visible and encouraging teachers to play active roles in the decision-making process. The members of a school in essence should be the members of a team who are working toward implementing
activities to foster their communicated vision. It must go beyond words and into action. There is no right or wrong way to lead; many different types of leadership styles have been successful, but there are common characteristics. According to Reeves et al. (2007), these commonalities include: (a) consistently support teachers, (b) school level decision-making based on a shared vision, and (c) an effective group decision-making and problem-solving process. It is everyday actions and continuous communication that are the key ingredients to encouraging trust and dedication to a common vision. The vision should be assessed, communicated, and reflected on so that it is not just menial words but the actions that a school is taking to promote trust between administrator, teacher, parent, and student. It is integral that a correlation exist between that shared vision and the day-to-day tasks of the school. While most schools articulate a vision related to doing what is best for students to succeed in life, schools with high levels of trust and mutual respect can also point to examples of how that mission influences the way policies are developed, decisions are made, and teachers are engaged (Reeves et al., 2007).

According to Noonan, Walker, and Kutsyuruba (2008) in “Trust in the Contemporary Principalship,” trust is a complex, dynamic, and multidimensional phenomenon that is related to a number of crucial variables concerning effectiveness of school organizations, human relationships, and behavior. The complexity that surrounds trust is its correlations to human behavior. Having trust within an organization is the ideal situation; however, if that trust is broken, then added negative stressors will become a part of the system. School leaders must take deliberate actions to make certain
that relationships are being built and that communication is open and effective. When it comes to decision making, there must be a transparency so that all is seen as equitable and in the best interest of the students. Teachers who feel trusted will go above and beyond to meet the needs of the students in their organization oftentimes for fear of breaking that trust but more so because of the interpersonal relationship that has developed within the school system. Teachers have an urgency to promote the vision: to do their part in making the vision a reality. In one of the more recent studies, Gimbel (2003) found that for principals, an underlying dimension of the meaning of trust was in one-to-one relationships they were sustaining with their teaching staffs. Gimbel (2003) indicated that “interpersonal trust involved the principals demonstrating reliability, consistency and follow-through” (p. 45). The two elements that are the foundation for trust would be classified as information sharing and open communication. The foundation fosters integrity promoting hard work and dedication to the common vision of the school organization. With the number of challenging issues that school systems face, state and federal accountability systems, teacher recruitment and retention, and so many others, the most pressing issue is that trust has been developed. Trust is then maintained through many complex situations that arise on a daily basis. Noonan et al. (2008) concludes:

Trust is an important element in the leadership in a contemporary school. Successful principals seem to be able to understand that trust in theory and practice is a necessary component of successful school leadership. Principals seeking to be leaders of successful schools would benefit from understanding the role of trust in successful leadership. (p. 13)
Bryk and Schneider (2002) conducted a research study that included periodic survey reports that would establish a relationship between trust level in a school and student learning. The researchers found trust fosters a set of conditions that make it more conducive for individuals to learn. Some of these conditions impacted by trust in the school system are the organizational conditions, structural conditions, and social psychological conditions.

According to the research findings by Bryk and Schneider (2002), trust affects productivity improvements in four broad ways: (a) trust among educators lowers their sense of vulnerability as they engage in new tasks associated with reform; (b) trust facilitates public problem solving within an organization; (c) trust undergirds the highly efficient system of social control found in school-based professional community; and (d) trust sustains an ethical imperative to advance the best interests of children and, thus, constitutes a moral resource for school improvement (Brewster & Railsback, 2003). Teachers who trust and feel trusted understand their roles in the school community and feel obligation to meet the demands of the job.

Trust between teachers or teacher-to-administrator does not happen by accident. Developing trust is not a simple matter. There are challenges to overcome, and there are always differences of opinion regarding the critical elements in a school system, whether it be curriculum, teaching practices or school policies. A high-achieving school will have teachers and administrators who will work together in developing and maintaining trusting relationships. Brewster and Railsback (2003) suggest that the greatest obstacle to overcome, however, is their past. If an issue in the past caused mistrust, it can be
overcome, especially if there is a sincere commitment to work past previous issues and take a step forward to address them. Building trust is a daunting task.

How can a school organization build trust? The campus administration must take the leading role. Bennis (1997) called for a “new kind of leader…with the ability to generate and sustain trust if organizations are to thrive in the 21st century” (p. 35). Research by Brewster has identified some general suggestions: (a) demonstrate personal integrity, (b) show that you care, (c) be accessible, (d) facilitate and model effective communication, (e) involve staff in decision-making, (f) celebrate experimentation and support risk, (g) express value for dissenting views, (h) reduce teachers’ sense of vulnerability, (i) ensure that teachers have basic resources, and (j) be prepared to replace ineffective teachers. Although campus leaders must lead the voyage of trust development, it is critical that teachers are receptive and support their leader. Trust will be established when everyone is working toward the common goal. To target the challenge of establishing trust between colleagues, the literature (Darling-Hammond, 1986; Russell & Spafford, 1986) called for the involvement of peers in the collaboration process rather than solely administrator based decision-making. According to Bryk and Schneider (2002),

Trust within a faculty is grounded in common understanding about what students should learn, how instruction should be conducted, and how teachers and students should behave with one another. For teachers to sense integrity among colleagues, a faculty must not only share these views but also perceive that actions taken by other teachers are consistent with them. (p. 130)

A trusting workplace will exhibit high levels of cooperation and efficiency and substantial student achievement.
Da Costa and Riordan (1996) examined the implication of teacher trust and efficacy. A qualitative study of 10 teachers who worked as five dyads in multiple cycles of collaborative consultation during one school year was performed. The goal of the study was to show a significant correlation between trust, efficacy, and collaboration. When trust was evident in the relationship between the members, the collaboration proved to be more effective. The Da Costa and Riordan’s review of the extant literature indicated that teacher trust was considered fundamental due to the risk-taking involved in effective collaboration. It is important to also note that although trust was critical and facilitated, collaboration was received with an open mind and was effective; it was not always deemed necessary if the teachers involved in the collaboration efforts all were highly efficacious teachers. According to Da Costa and Riordan (1996), highly efficacious teachers even in the absence of trust are less likely to avoid collaboration because they believe in their personal capabilities. Thus, there are several dimensions to teacher trust and success of the school as a whole.

Trust is a multidimensional characteristic that has been proven to be a quality in effective school settings, school administrators, and school teachers. Butler (1991) described the dimensions as: (a) Openness/honesty, (b) competence, (c) caring, and (d) reliability. Figure 2.2 is a comprehensive conceptualization of interpersonal trust. It provides an explanation of the characteristics that influence the dimensions and the outcomes. When the dimensions of trust are evident, there is better productivity, cooperation, and coordination.

Figure 2.2. Conceptualization of Interpersonal Trust in a Professional Context. An Individual's Behavior Reliance on Another Person Under a Condition of Risk.

As seen in the illustration by Currall and Judge (1995), Openness and Honesty encompasses two segments that target behavior in which people can communicate, share ideas, and information without fear of judgment. Competence involves the ability to perform designated and necessary functions. Gabarro (1987) distinguished between functional competence and personal competence: functional being the knowledge and skills necessary to complete the task and personal referring to people skills. Caring is the behaviors that are exchanged between persons that reflect a true concern for one’s well being. Caring with respect to trust in an organizational setting has also been termed sharing (Whitener et al., 1997), which includes employee involvement and delegation of control. Reliability involves being accountable for actions: acting in good faith that what you are doing is for the benefit of the organization. Reliability also involves actions over time and across situations such that future actions can be predicted with a degree of accuracy (Mayer, Davis, & Schoorman, 1995).
According to Williams (2001) in her research entitled, *A Conceptualization of Interpersonal Trust in the Workplace*, the conceptual framework presented represents the components of overall interpersonal trust construct. Each dimension is considered a necessity. Trust is an authentic cornerstone for success in organizations. There is obligation to foster trust in the workplace and learning environment. Trust must be strongly advocated for student success, and teacher success.

**Collective Efficacy**

Teacher efficacy and trust only partially explain successful school organizations. From an organizational perspective, collective efficacy may help to explain the differential effect that schools have on student achievement. The link between teacher self-efficacy and collective efficacy was made by Albert Bandura’s work. Bandura’s research indicates that teachers’ perceptions of self and group capability influence their actions, and it also suggests that these actions will be judged by the group relative to the groups norms such as those set by collective efficacy beliefs (Goddard & Goddard, 2001a). Bandura (1993, 1997) suggests that, when aggregated, teachers’ efficacy perceptions represent an emergent organizational construct called collective efficacy. As previously discussed in the research concerning self-efficacy, Woolfolk and Hoy (1990) report that teacher’s sense of self-efficacy affect direct instructional practice and overall attitude toward the educational process. Bandura (1997) reports that taking this individual teacher efficacy concept to the organizational level is “collective efficacy, which is concerned with the performance capability of a social system as a whole” (p. 469). Therefore, collective efficacy is an extension of self-efficacy.
Goddard (2003) further defines collective efficacy as “the perceptions of teachers in a school that the faculty as a whole can organize and execute the courses of action required to have a positive effect on students” (p. 184). In addition, Goddard’s research indicates, collective efficacy is defined as a group’s shared belief, coming from a combination of individual group members’ perception of the group’s capabilities to succeed at a given task. Performance of a particular group can be based on the amount of the collective efficacy they possess. It is a campus team effort. If the team believes in superior achievement, then they are going to work as one entity to achieve that goal. It is through the team member’s perception of the shared belief, trust is built.

Collective efficacy goes hand-in-hand with trust because they must work together to accomplish the goal. Teaching is typically performed in a group context (Tschannen-Moran, Woolfolk Hoy, & Hoy, 1998). Teachers work communally: by grades and subject areas, within physical domains, and according to perceived self and collective efficacy with the school’s social system.

Teachers, like members of most organizations, share their beliefs and actions largely in conformance with the structures, policies and traditions of the workday world around them and where teachers collectively perceive students as capable learners, and themselves as capable teachers seem more likely to persevere and foster students’ academic gains. (Rosenholtz, 1989, p. 2)

Bandura (1997) indicates an organization’s beliefs about the ability of teachers’ efficacy to produce results is undoubtedly the result of an important feature of its operative culture (p. 476).

In essence, collective efficacy ties together both self-efficacy and trust. When the group is confident about their abilities, there is bound to be more effective collaboration
and communication. Hoover-Dempsey, Bassler, and Brissie (1987) conducted a study on collective efficacy, though these researchers did not use the coined phrase of “collective teacher efficacy”; their methodology involved the aggregation of teachers and individual efficacy perceptions to the school level. The researchers reasoned, teacher’s efficacy influenced the ‘setting’ of a school through its influence on multiple teacher behaviors. The researchers surveyed 66 urban, suburban, and rural elementary school teachers to prove their hypotheses that the level of teacher efficacy in a school was positively related to various types of parental involvement. They found that the average level of teacher efficacy in a school was positively related to parent participation in parent-teacher conferences, parent volunteer work at school, parent home tutoring, and parent support of the teacher’s work. These results provided initial support for Bandura’s (1993, 1997) assertion that collective teacher efficacy is more strongly associated with important school outcomes. Researchers who followed Hoover-Dempsey, Bassler, and Brissie, developed the construct and named it appropriately and provided the formal definition.

Teacher self-efficacy has been taken up a notch by current researchers, Goddard, Hoy, and Woolfolk Hoy (2000). They have developed a corresponding construct and have named it collective teacher efficacy. Goddard, Hoy, and Woolfolk Hoy (2000) define this as “perceptions of teachers in a school that the efforts of the faculty as a whole will have a positive effect on students” (p. 483) with the faculty in general agreeing that “teachers in this school can get through the most difficult students” (p. 485). In a faculty where collective efficacy is evident, there is no student who cannot be
taught. In these trying times when students come to school with so many outside factors that could contribute to their success or downfall, a school with collective efficacy may be their saving grace. The teacher team is able to work together to reach the common goal of helping all students succeed.

Research points out that it is the concept of team where no one is left behind, and the belief there is not anyone who cannot be reached, that makes collective efficacy so important. Schools, or other organizational systems with collective efficacy, make the choice to seek out means to implement the vision. In other words, you live it, you believe, you make it happen. According to Protheroe (2008):

Teachers in a school characterized by a can-do, together we can make a difference attitude are typically more likely to accept challenging goals and be less likely to give up easily. In contrast, teachers in a school characterized by a low level of collective efficacy are less likely to accept responsibility for students’ low performance and more likely to point to student risk factors, such as poverty and limited knowledge of English, as causes. (p. 44)

A relationship between high achieving schools and collective efficacy is highlighted through a number of studies. Attitude is something that can be worked on. By building trust and bringing in teachers with teacher self-efficacy, collective efficacy can be strengthened to have a positive impact regardless of the socioeconomic status or language barriers of the students in the school system.

According to Bandura (1993, 1997) the collective efficacy perceptions of teachers in a given school are important school organizational features. Collective teacher efficacy has the potential to contribute to high student achievement. There is a myriad of difficulties facing today’s students, but the stressors have a less of an impact when collective efficacy is apparent. As efficacy continues to impact student
achievement in a positive matter, then efficacy will thrive. There is strong research
supporting school systems that lead teachers in a systematical way to develop efficacy.

Goddard in his 1998 study developed and implemented a 21-item scale to measure
collective teacher efficacy in 47 urban elementary schools and as predicted, collective
teacher efficacy has a positive effect on the differences in student achievement that occur
between schools (Goddard, 1998). Goddard and Goddard (2001a) analyzed the
relationship between teacher efficacy and collective efficacy and confirmed the
constructs are different but have a positive relationship. Teacher efficacy is a predicator
of between-school variance of collective efficacy, and this relationship is found in its
converse (Goddard & Goddard, 2001b). Nonetheless, collective efficacy is an essential
goal for the school organizations to be successful.

The key to unlocking the potential of a school organization is collective efficacy
because it through efficacy the talents of teachers are developed and shared. The
collective group of teachers with a common goal will have a strong sense of
commitment to the school’s success. A transformation can occur when the focus of a
campus becomes to develop, encourage, and promote efficacy in order to make
significant improvements to student learning. The level of collective efficacy more than
all factors beyond a school’s control will be a strong predicator of a school’s
performance. Campus leaders who work to construct collective teacher efficacy will
make greater strides in closing the achievement gap (Brinson & Steiner, 2007).

In the article, “Building Collective Efficacy” by Brinson and Steiner (2007), they
state that collective efficacy has an impressive list of positive consequences. Strong
collective efficacy insures several of these positive outcomes: (a) improves students’ performance, (b) ameliorates the negative effects of low socioeconomic status (SES), (c) enhances parent/teacher relationships, and (d) creates a work environment that builds teacher commitment to the school (Brinson & Steiner, 2007).

Researchers have only begun to focus on specific actions that schools can take to improve collective efficacy; this is still a fairly new idea. It is in the emerging stages of research; however, the following actions on the part of principals have been noted to improve collective efficacy: (a) build instructional knowledge and skills, (b) create opportunities for teachers to collaboratively share skills and experience, (c) interpret results and provide actionable feedback on teachers’ performance, and (d) involve teachers in decision-making (Brinson & Steiner, 2007). Further research will facilitate the transformation.

The transformation will begin when fundamental concepts are addressed so that teachers can accept the challenges that they will face on a daily basis rather than make excuses about their lack of student achievement. They will make a commitment to student achievement regardless of factors beyond their control.

In 2003, Ross, Hogaboam-Gray, and Gray completed a study in order to support the notion that collective efficacy is linked to high student achievement. This study of 2,170 teachers in 141 elementary schools used a structural equation model to examine the collective efficacy in the school systems. The study found that when members of the school were involved in the day-to-day operations and establishment of school policies and procedures, such as school goals and decision-making processes, then an even
stronger influence of collective teacher efficacy was evident. Individuals who feel that they will be successful are more likely to not only step up to the challenge but meet the challenge at hand because they try harder to achieve despite the roadblocks along the way. Collective teacher efficacy influences student achievement by creating school norms and sanctions that motivate persistence (Ross et al., 2003). Persistence is a vital and powerful characteristic that guarantees collective efficacy. It ensures that teachers are not going to give up (throw in the towel) when things get tough. The group will collaborate, communicate, and persist until the goal is attained.

The assumption has been made by many researchers that people are more likely to work toward and achieve goals that have value and meaning to them, and the goal that they are trying to attain is relevant and has significant value. To measure collective efficacy, researchers have used the group-level aggregate of individual perceptions of collective efficacy, finding that collective efficacy positively predicts the dependent variables identified in the study (Goddard, 2002). With the number of high-stakes accountability measures faced by school organizations, collective efficacy becomes a cornerstone in the building of a positive organizational climate and culture of the school. Collective efficacy beliefs empower teachers and influence the number of duties that they perform, such as curriculum planning, design, and implementation, as well as communication with colleagues, parents, and student. The ultimate impact will be evident in the students’ achievement.

Bandura (1997) has found “the stronger the beliefs people hold about their collective capabilities, the more they achieve” (p. 480). Other researchers, confirmed this
finding. Through a meta-analysis on efficacy, Enderlin-Lampe (1997) found that the impact that collective efficacy has on meaningful school reform is substantial.

Transformation of schools can occur when collective efficacy is at the foundation of the change. Goddard, Hoy, and Woolfolk Hoy (2000) concludes that as a result of recent studies, “School culture influences members strongly by setting expectations for action governed by thinking about group capability. Collective efficacy clearly shapes teachers’ self-referent thought and the control work groups exert over their circumstance” (p. 24). Goddard (2000) provides the illustration in Figure 2.3 as a simplified model of collective efficacy adapted from the teacher efficacy model of Tschannen-Moran, Woolfolk Hoy, and Hoy (1998).

Figure 2.3. Goddard’s Simplified Model of Collective Teacher Efficacy.
Conclusion

The vision for our school systems is unmistakable. The federal government wants No Child Left Behind by requiring schools and school districts to meet annual yearly improvement targets. At the same time, the Texas state accountability system has schools working toward recognized and exemplary status and gold performance awards. Thus, it is more important than ever for Texas schools and school districts to generate a positive school culture based on high teacher self-efficacy, trust, and collective efficacy. When you attain these three concepts, teacher self-efficacy, trust, and collective efficacy, then a positive school culture has been established. A positive school culture has been found to be associated with higher student motivation and achievement, improved teacher collaboration, and improved attitudes of teachers toward their job (Stolp & Smith, 1995).

In his book, The Lifeworld of Leadership, Sergiovanni (2000) says, “This leadership is moral because it emphasizes bringing diverse people into a common cause by making the school a covenantal community” (p. 167). A school culture that is built around widely accepted core goals and values, always places students and learning first. In order to solidify this approach, an educational leader must be willing to view differences as strengths and encourage individuality through meaningful communication and human interaction. However, leadership itself is not based solely on human interaction and the ability of a leader to communicate. Rather, a good educational leader combines meaningful communication while promoting a sense of autonomy within a
school and openly utilizes trust and respect to define the existing relationship with the staff. The focus of schools, therefore, is effective instruction.

Schools must be dedicated to offering excellent instruction by teachers who are confident in their fields and are more than certain but convinced that their students can and must learn. They set high expectations for themselves, their colleagues, and their students. Ahuja (2007) stated:

The school’s mission is communicated to students by word and by deed, hour by hour, day by day, year by year. A clear focus on mission becomes paramount. This mission-focus vents the institution of negative energy. What one does is one is supposed to be doing, and this reinforces the mission because one sees others doing the same. Synergy produces more from less. Excellence, which is rarely mentioned at the school, becomes less a goal and more a given. (p. 16)

Developing teacher self-efficacy, trust, and collective efficacy takes work and commitment from the entire school; it is a team effort. They become a working community collaborating and communicating together in the best interest of the children. When examining the literature, it is important to foster and maintain the urgency in establishing these elements in our schools. Research proves that they create positive learning environments, open communication in which everyone is valued, and decisions are made collaboratively. A climate of distrust, chaos, or disrespect impedes student and staff motivation and may limit the extent to which students achieve (Center for Comprehensive School Reform and Improvement, 2009). On the other hand, high academic achievement for all students is possible when teacher self-efficacy, trust, and collective efficacy are the foundation for the school structure. The school structure will be filled with safety, pride, respect, trust, and motivation for all.
In summary, information provided in this chapter included the literature pertinent to the study of teacher self-efficacy, trust, and collective efficacy. In the review of the literature, information relevant to teacher self-efficacy, trust, and collective efficacy was determined to impact student achievement and teacher retention. It is clear that there is and will continue to be a need to improve teachers’ belief in themselves and in their school and develop a sense of trust in order to meet the needs of all students, regardless of factors that are beyond the school’s control. This study was undertaken to complement the existing body of knowledge related to this fundamental need to reform our school systems and provide potential solutions.
CHAPTER III  

METHODOLOGY

One of the purposes of the study was to investigate teachers’ self-efficacy and to explore its relationship with teacher trust, collective efficacy, and teacher demographics. Three surveys were used for this study: (a) the Teachers’ Sense of Efficacy Scale (TSES), (b) the Omnibus T-Scale (OTS), and (c) the Collective Efficacy Scale (CE-Scale). For the purpose of this study, the Teachers’ Sense of Efficacy Scale, the Omnibus T-Scale, and the CE-Scale analyses include only the teachers at the district being studied. The teacher survey data were derived from teachers in the 2009-2010 teacher fall cohort in an urban school district in San Antonio, Texas.

A proposal for the research study was submitted to and approved by the students’ graduate committee and the Institutional Review Board (IRB) at Texas A&M University. Permission to conduct this study was granted by the Superintendent of Schools from the district being studied in September of 2009.

The study focused on three specific research questions:

1. What are the scores for each campus on the following surveys: Teachers’ Sense of Efficacy Scale (TSES), Collective Efficacy Scale (CE-Scale), and Omnibus T-Scale (OTS), and are there any differences among campus scores?

2. What are the demographic differences of teachers’ sense of self-efficacy, collective efficacy, and trust beliefs?
3. Do teachers’ self-efficacy, collective efficacy, and trust beliefs remain constant for every campus?

This researcher used data collected from the identified survey instruments and district Public Education Information Management System (PEIMS) teacher information. Each teacher’s name and identification number will remain sanitized and confidential. The researcher secured permission to use three surveys: (a) Teachers’ Sense of Efficacy Scale (TSES), (b) Collective Efficacy Scale (CE-Scale), and (c) Omnibus T-Scale (OTS). The researcher added demographic variables into the survey instrument and had a survey company that generated the survey online (Survey Monkey). The demographic variables were: school, gender, years of experience, ethnicity, teacher certification, had mentor first year of teaching, found mentor teacher helpful, and am or have been a mentor teacher.

In this chapter, the researcher elaborated on procedures that were followed in order to accomplish the purpose of the study. Sections contained in this chapter include: (a) population, (b) instrumentation, (c) procedures, (d) data analysis, and (e) survey.

Permission was requested and granted from the district leadership to conduct the research study. Additionally, an information sheet was provided to the participants who were being asked to participate in the survey (Appendix A). Teacher anonymity was protected through the use of unidentifiable coding used in the study survey instrument and data collection. The first survey, the Teachers’ Sense of Efficacy Scale (TSES), was developed in 2001 by Tschannen-Moran and Woolfolk Hoy. The TSES measures the teachers’ sense of self efficacy. The researchers examined the construct validity of the
long form of the TSES by assessing the correlation of the measure and other exiting measures of teacher efficacy. As expected, total scores on the TSES were positively related to the Rand Items (r=0.18 and 0.53, p<0.01), as well as to both the personal teaching efficacy (PTE) factor of the Gibson and Dembo (1984) measure (r=0.645, p<.001) and the general teacher efficacy (GTE factor (r=0.16, p<0.01). Positive correlations with other measures of personal teaching efficacy provide evidence for construct validity.

**Population**

The population for this study included 714 teachers who completed the teacher self-efficacy, teacher collective efficacy, and teacher trust surveys from an urban school district in southwest San Antonio. The researcher gathered data from the participating teachers employed during the 2009-2010 school year. The data were gathered during a two-week period during the month of March 2010. The teachers participating in the survey were given a two-week window in which to complete the survey. There was extensive research and planning done before implementing the survey: (a) the research population was considered, (b) the scope of the survey instrument and the added demographics were considered, (c) the online survey system was used for ease for participating teachers, (d) timeframe was considered (not too early in the school year and in month), (e) teachers would have ample time to participate, and (f) how the data would be analyzed after the fact was considered. Through voluntary participation, teachers participated by completing the Teachers’ Sense of Efficacy Scale, CE-Scale, and Omnibus T-Scale. Participating teachers took the survey during their conference time
and or before or after school. The survey was administered through the use of an online system and all the participants received the same instructions through an email prior to their participation.

The survey is an 81-item question instrument that requires participating teachers to answer questions using a Likert Scale analysis of questions subcategorized as (a) Teachers’ Sense of Efficacy Scale, CE-Scale, and Omnibus T-Scale. The survey reflects questions addressing the teacher’s sense of self-efficacy, collective efficacy, and trust.

**Instrumentation**

The researcher chose to combine three survey instruments: (a) Teachers’ Sense of Efficacy Scale (TSES), (b) Omnibus T-Scale, and (c) Collective Efficacy Scale (CE-Scale). This instrument is comprised of 81 questions and is divided into three sections.

Section one is labeled Teachers’ Sense of Efficacy Scale and is comprised of 24 questions (see Appendix B for questions).

To determine the Efficacy in Student Engagement, Efficacy in Instructional Practices, and Efficacy in Classroom Management subscale scores, this researcher computed un-weighted means of the items that load on each factor. These groupings are: (a) Efficacy in Student Engagement: Items 1, 2, 4, 6, 9, 12, 14, 22; (b) Efficacy in Instructional Strategies: Items 7, 10, 11, 17, 18, 20, 23, 24; and (c) Efficacy in Classroom Management: Items 3, 5, 8, 13, 15, 16, 19, 21.

Section two consisted of 21 questions and is categorized as the CE-Scale (see Appendix C for questions). This sections used a 1-6 Likert scale response, with 1 reflecting strongly disagree going all the way to number 6 with strongly agree. Ten of
the items in this scale are reversed scored, that is, “1” is scored “6,” “2” is scored “5,” etc. For example, the item, “If a child doesn’t want to learn teachers here give up,” is scored in reverse. Thus, a strongly agree “6” would be scored “1,” suggesting low efficacy. To score the scale for this section of the survey, first scores were reversed on the following items: 3, 4, 8, 10, 11, 12, 16, 18, 19, 20. Then the scores were added for all 21 items: the greater the sum, the higher the collective efficacy. Finally, all the individual teacher scores were averaged to find a collective efficacy score of the school.

Section three is categorized as Omnibus T-Scale (see in Appendix D for questions) and consists of 26 questions. In this section, a Likert scale was used to record the teachers’ responses. The scale also ranged from 1 reflecting strongly disagree going to number 6 with strongly agree. The latest version of the Omnibus T-Scale (26 Likert items) measures three subscales: (a) Faculty Trust in the Principal, (b) Faculty Trust in Colleagues, and (c) Faculty Trust in Clients. Then the 26 questions were scored: (a) Faculty Trust in the Principal - Items 1, 4*, 7, 9, 11*, 15, 18, 23*; (b) Faculty Trust in Colleagues - Items 2, 5, 8*, 12, 13, 16, 19, 21; and (c) Faculty Trust in the Clients - Items 3, 6, 10, 14, 17, 20, 22, 24, 25, 26* (*Items are reversed scored, that is, [1=6, 2=5, 3=4, 4=3, 5=2, 6=1]). First, for each school, the average score for every item was computed. Then, the average item scores were used in the next set of computations to determine the faculty trust subtest scores for each school. For each of the three subtests, school scores were computed by adding the values for the items composing that scale and then dividing by the number of items. Standardized scores were computed for the T-scales for purposes of comparison: school subtest scores were converted to standardized
scores with a mean of 500 and a standard deviation of 100, using the following formulas:
(a) Standard Score for Trust in Clients (TCl) = \(100(TCl-3.53)/.621+500\); (b) the
difference between the school score on (TCl) and the mean for the normative sample
(TCl-3.53) was computed. Then, the difference was multiplied by one hundred
[100(TCl-3.53)]. Finally, the product was divided by the standard deviation of the
normative sample (.621). At the end of the computations, 500 was added to the result. As
a result, a standardized score for Faculty Trust in Clients was computed.

For the Trust in the Principal and Trust in Colleagues, the following formulas
were used: (a) Standard Score for Trust in the Principal (TP) = \(100(TP-4.42)/.725+500\)
and (b) Standard Score for Trust in Colleagues (TCo) = \(100(TCo-4.46)/.443+500\).

As a result, the standardized school scores against the normative data provided in
the Ohio sample were used. For example, if one school’s score is 700 on faculty trust in
colleagues, it is two standard deviations above the average score on faculty trust in
colleagues of all schools in the sample; that is, the school has more faculty trust in
colleagues than 97% of the schools in the sample. This system is the same as the one
used in reporting individual scores on the SAT, CEEB, and GRE. The range of these
scores is presented in Table 3.1.
Table 3.1. Range of Scores for Trust in Principal

<table>
<thead>
<tr>
<th>Score</th>
<th>Range</th>
</tr>
</thead>
<tbody>
<tr>
<td>200</td>
<td>Lower than 99% of the schools</td>
</tr>
<tr>
<td>300</td>
<td>Lower than 97% of the schools</td>
</tr>
<tr>
<td>400</td>
<td>Lower than 84% of the schools</td>
</tr>
<tr>
<td>500</td>
<td>Average</td>
</tr>
<tr>
<td>600</td>
<td>Higher than 84% of the schools</td>
</tr>
<tr>
<td>700</td>
<td>Higher than 97% of the schools</td>
</tr>
<tr>
<td>800</td>
<td>Higher than 99% of the schools</td>
</tr>
</tbody>
</table>

The teacher’s demographics served as the independent variables (see Appendix E), which were analyzed using the multivariate analysis (MANOVA). The MANOVA is a complex statistic similar to ANOVA but with multiple dependent variables (survey items) analyzed together (Coolidge, 2006). The dependent variables are related conceptually and are correlated with one another at a low to moderate level. MANOVA provided a multivariate F based on a linear combination of dependent variables, as well as univariate Fs, for each separate dependent variable. Thus, the MANOVA provides an analysis for the multiple dependent variables by several fixed factor/independent variables (teacher demographics).

The names and identifying information of all the teachers who participated in the survey were not provided to the researcher as to keep the confidentiality of the individual. Scoring of the Teachers’ Sense of Efficacy Scale, a factor analysis was used to determine how the subjects responded to the questions. To determine the TE and PE scores, the researcher computed un-weighted, means of the items that were .35 or higher,
on each respective factor. The researcher did not combine the TE and PE scores to compute a total score because the TE and PE scores represent independent factors.

**Validity and Reliability of Instruments**

The alpha indicated in Table 3.2 indicates the TSES is superior to previous measures of teacher efficacy in that it has a unified and stable factor structure and assesses a broad range of capabilities that teachers consider important to good teaching, without being so specific as to render it useless for comparisons of teachers across contexts, levels, and subjects. The reliability for the 18-item Teachers’ Sense of Efficacy Scale is 0.95. Thus, the emergence of the second-order factor and the moderate positive correlations of the three subscales suggested that the 18 items in this survey could be considered to measure the underlying construct of efficacy and that a total score as well as three subscale scores could be calculated based on the 18 items in the survey. The researchers examined the appropriateness of calculating a total score for the 18 items and conducted a principal-axis factor analysis specifying one factor. All 18 items loaded on this factor, with loadings ranging from .48 to .70.

<table>
<thead>
<tr>
<th></th>
<th>Mean</th>
<th>SD</th>
<th>Alpha</th>
</tr>
</thead>
<tbody>
<tr>
<td>TSES</td>
<td>7.1</td>
<td>.94</td>
<td>.94</td>
</tr>
<tr>
<td>Engagement</td>
<td>7.3</td>
<td>1.10</td>
<td>.87</td>
</tr>
<tr>
<td>Instruction</td>
<td>7.3</td>
<td>1.10</td>
<td>.91</td>
</tr>
<tr>
<td>Management</td>
<td>6.7</td>
<td>1.10</td>
<td>.90</td>
</tr>
</tbody>
</table>
The second survey incorporated into this study was the Omnibus T-Scale. The Omnibus T-Scale is a short operational measure of these three dimensions of trust, which can be used for either elementary or secondary schools. The reliabilities of the three subscales typically range from .90 to .98. Factor analytic studies of the Omnibus T-Scale support the construct and discriminant validity of the concept. The Omnibus T-Scale has three subscales: (a) Faculty Trust in the Principal, (b) Faculty Trust in Colleagues, and (c) Faculty Trust in Clients. Hoy’s research led him and his colleagues to conclude there are at least three dimensions of faculty trust: (a) trust in the principal, (b) trust in colleagues, and (c) trust in clients (students and parents). Vulnerability, benevolence, reliability, competence, honesty, and openness characterize each of these dimensions of trust (Hoy & Tschannen-Moran, 2003).

The third survey incorporated into this study was the Collective Efficacy Scales (CE-Scale). The development of the 21 collective efficacy scale included several phases. Scale development began initially by modifying items from the original Gibson and Dembo (1984) teacher efficacy scale to reflect collective efficacy (i.e., changing the object of the efficacy items from “I” to “We”). Next, additional items were written in response to a review by a panel of experts with experience in teacher efficacy research. Following this review, the items were subjected to a field test and then a pilot test with 46 teachers in 46 schools (1 teacher from each school). Results from the pilot study suggested that the 21 items did indeed offer a valid and reliable measure of collective efficacy (Goddard, Hoy, & Woolfolk Hoy, 2000).
Based on the promise of the results from the initial phases of their study, the researchers decided to test the criterion-related validity, predictive validity, and reliability of scores on the collective efficacy scale in a more comprehensive sample. A sample of 452 teachers in 47 randomly selected elementary schools in a large urban district in the Midwest completed the collective efficacy survey. At the school level, the 21 collective efficacy items were submitted to a principal axis factor analysis. All items loaded strongly on a single factor and explained 57.89% of the item variation. The alpha coefficient of reliability was strong (.96) (Goddard, 2002).

Criterion-related validity of the school collective efficacy scores was tested in several ways. The criterion variables examined were (a) personal teaching efficacy (Hoy & Woolfolk, 1993), (b) faculty trust in colleagues (Hoy & Kupersmith, 1985), and (c) environmental press (Hoy & Sabo, 1998). Personal teaching efficacy is a measure of a teacher’s self-perceptions of capability to educate students. It was predicted that when aggregated to the school level, teachers’ perceptions of personal efficacy would be moderately and positively related to collective teacher efficacy; a high correlation was not expected because personal and collective teacher efficacy have different referents (self versus group). Moreover, the collective teacher efficacy measure directly assesses perceptions of both perceived competence and task, whereas the personal teacher efficacy measure includes only items about competence. As predicted, there was a moderate and positive (r= .54, p<.01) correlation between personal teacher efficacy aggregated at the school level and collective teacher efficacy. A positive relationship between faculty trust in colleagues and collective teacher efficacy was predicted, and
similar to the pilot results, trust in colleagues was positively and significantly related to collective teacher efficacy ($r=.62$, $p<.01$).

Finally, the researchers predicted no relationship between collective teacher efficacy and environmental press or the extent to which teachers experience “unreasonable community demands” (Hoy & Sabo, 1998). There is no a priori reason to expect that teachers’ assessments of group capabilities would be associated with their perceptions of external demands. In other words, a demanding task and external pressures do not necessarily make people feel more or less capable. It is how they handle the pressure that determines capability. As predicted, the observed relationship between collective teacher efficacy and environmental press was not statistically significant ($r=.05$, n.s.).

As a test of predictive validity, the researchers employed hierarchical linear modeling to show that scores on the collective efficacy scale were significant predictors of the mathematics and reading achievement (measured by the 7th edition of Metropolitan Achievement Test) of 7016 2nd, 3rd, and 5th grade students who attended the 47 sampled schools. Taken together, these results provide content, criterion-related, and predictive validity evidence for scores on the collective efficacy scale as well as strong reliability evidence.

**Procedures**

The procedure used consisted of first contacting the superintendent of the school district being studied to secure her permission to perform the study in the district. A letter was drafted, submitted, and approved by the Internal Review Board at Texas A&M
and submitted and signed by the Superintendent of the school being studied. The letter assured subject confidentiality, as well as a detailed explanation of the researcher’s intent. Permission to proceed with the study was granted by the Superintendent on September 2009.

Next, the researcher, through email, sent a letter to participants assuring subject confidentiality, as well as a detailed explanation of the intent of the research. The researcher then sent a survey link inviting all participants to participate in the study by answering the questions on the link provided. Consent to participate in the study was assumed by the willingness to answer the survey questions online.

**Data Analysis**

All three surveys were analyzed using the scoring suggested by the original survey developers, as described at the beginning of this chapter. Then, descriptive statistics were used to describe results; the MANOVA was conducted to find differences between teacher demographics and survey question items. If MANOVA revealed significant differences, the Scheffé post hoc test was applied to determine actual between group differences.

Data were entered into SPSS version 18.0 for Windows for analysis. As previously stated, the analyses compared the teacher’s demographics from a local district using the Teachers’ Sense of Efficacy Scale, CE-Scale, and Omnibus T-Scale. Responses from the teachers were used to conduct this study.
Teacher demographics was reported in descriptive statistic format using frequencies and percentages. The frequency is the number of participants who fit within a certain category. Percentages provide a representation for additional comparisons.

The Teachers’ Sense of Efficacy Scale, Omnibus T-Scale; CE-Scale survey instruments chosen by the researcher were analyzed using a multivariate general linear model referred to as multiple analysis of variance (MANOVA). A MANOVA was used to see the main and interaction effects of categorical variables (scales on each survey for each separate MANOVA analysis) and on multiple dependent interval variables (demographic variables, for each survey for each separate MANOVA analysis). The MANOVA tests were used to test the differences in the centroid (vector) of means of the multiple interval dependent and for various categories of the independent(s) (for each separate survey). Post hoc comparisons were also used to conduct to see which values of a factor contribute most to the explanation of the dependents.
CHAPTER IV

RESULTS

Organization of Data Analysis

Within this chapter, results of the study are presented using the following organization: (a) demographic data, (b) Cronbach alphas for research variables, and (c) data analysis results for each research question.

Research questions used to guide the study were:

1. What are the scores for each campus on the following surveys: Teachers’ Sense of Efficacy Scale (TSES), Collective Efficacy Scale (CE-Scale), and Omnibus T-Scale (OTS), and are there any differences among campus scores?

2. What are the demographic differences of teachers’ sense of self-efficacy, collective efficacy, and trust beliefs?

3. Do teachers’ self-efficacy, collective efficacy, and trust beliefs remain constant for every campus?

Questions used in the survey related to each dependent category and were grouped together for analysis. The questions themselves were derived from three surveys that had already been developed, researched, and had been tested for their validity and reliability. The surveys were: Teachers’ Sense of Efficacy Scale (TSES), Collective Efficacy Scale (CE-Scale), and Omnibus T-Scale (OTS). The first survey, the Teachers’ Sense of Efficacy Scale (TSES), was developed by Tschannen-Moran and Woolfolk Hoy (2001). The Teachers’ Sense of Efficacy Scale is a measure of the three dimensions
of teaching efficacy: (a) efficacy for instructional strategies, (b) efficacy for classroom management, and (c) efficacy for student engagement (Kurz, Woolfolk Hoy, & Hoy, 2007). The second survey incorporated into this study was the Omnibus T-Scale (Hoy, 2002). The Omnibus T-Scale (OTS) is a short, operational measure of these three dimensions of trust, which can be used for either elementary or secondary schools. The third survey incorporated into this study was the Collective Efficacy Scale (CE-Scale) (Goddard, Hoy, & Woolfolk Hoy, 2000; Goddard, Tschannen-Moran, & Hoy, 2001a). The Collective Efficacy Scale measures the perceptions of teachers that the efforts of the faculty as a whole will have a positive effect on students (Goddard, Hoy, & Woolfolk Hoy, 2004).

As indicated in Chapter III, the three surveys were combined. Afterwards, the questions were categorized under the following areas/categories: (a) student engagement, (b) instructional strategies, (c) classroom management, (d) trust in principal, (e) trust in colleagues, (f) trust in clients, and (g) collective efficacy. For example, all questions dealing with student engagement were grouped together, all questions dealing with classroom management were grouped together, etc. The independent variables of school/campus, gender, years of experience, ethnicity, teacher certification, mentor first year, mentor teacher helpful, and are or have been a mentor teacher, were used as the explanatory categories. Presentation of this data analysis is used to answer each research question from the respective explanatory category.

Research questions were analyzed using multivariate analysis of variance (MANOVA), and if the MANOVA was identified as significant, separate analyses of
variance (ANOVA’s) were done for the individual dependent variables (surveys) and independent variables (teacher demographics: school, gender, years of experience, ethnicity, teacher certification, mentor in first year, mentor helpful, have been mentor teacher) for each research question. The significance level for all statistical analyses was set at the .001 level unless otherwise indicated. Mean differences and standard deviations were listed for each variable with a significance score of less than .05 (p < .05).

As an added measure of statistical significance for differences in group means, Scheffé post hoc tests were run to determine the significant differences between group means in an analysis of variance setting. Scheffé post hoc test results reveal where the mean differences and standard deviations lie for the following categories: student engagement, instructional strategies, classroom management, trust in principal, trust in colleagues, trust in clients, and collective efficacy. Each category of questions was developed from the survey. Scheffé’s test is considered to be one of the most conservative post hoc tests and appropriate when using a comparison of a complex set of group means. The Scheffé test is a method for adjusting significance levels in a linear regression analysis to account for multiple comparisons. It is particularly useful in analysis of variance and in constructing simultaneous confidence bands for regressions involving basis functions. Scheffé’s method is a single-step multiple comparison procedure that applies to the set of estimates of all possible contrasts among the factor level means, not just the pair-wise differences considered by the Tukey-Kramer method (Winer, Brown, & Michels, 1991).
Demographic Data

Demographic variables include: (a) frequencies and percents of the number of teachers surveyed by school/campus, (b) frequencies and percents by gender, (c) frequencies and percents for years of experience of teachers surveyed in this study, (d) frequencies and percents for ethnicity of teachers surveyed in this study, (e) frequencies and percents by teacher certification program, (f) frequencies and percents by mentor first year of teaching, (g) frequencies and percents for mentor teacher very helpful, and (h) frequencies and percents of I am or have been a mentor teacher.

Frequencies and percents for each school/campus are presented in Table 4.1, where the largest proportion of teachers 170 (26.2%) were from the school being studied. Six hundred and forty-eight individuals participated in the study, out of 741 in the district (see Table 4.1). The survey had an 87% response rate.

<table>
<thead>
<tr>
<th>School</th>
<th>Frequency</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Campus 1</td>
<td>36</td>
<td>5.6</td>
</tr>
<tr>
<td>Campus 2</td>
<td>27</td>
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<tr>
<td>Campus 3</td>
<td>39</td>
<td>6.0</td>
</tr>
<tr>
<td>Campus 4</td>
<td>32</td>
<td>4.9</td>
</tr>
<tr>
<td>Campus 5</td>
<td>42</td>
<td>6.5</td>
</tr>
<tr>
<td>Campus 6</td>
<td>38</td>
<td>5.9</td>
</tr>
<tr>
<td>Campus 7</td>
<td>38</td>
<td>5.9</td>
</tr>
<tr>
<td>Campus 8</td>
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<td>6.2</td>
</tr>
<tr>
<td>Campus 9</td>
<td>37</td>
<td>5.7</td>
</tr>
<tr>
<td>Campus 10</td>
<td>51</td>
<td>7.9</td>
</tr>
<tr>
<td>Campus 11</td>
<td>42</td>
<td>6.5</td>
</tr>
<tr>
<td>Campus 12</td>
<td>56</td>
<td>8.6</td>
</tr>
<tr>
<td>Campus 13</td>
<td>170</td>
<td>26.2</td>
</tr>
<tr>
<td>Total</td>
<td>648</td>
<td></td>
</tr>
</tbody>
</table>
The predominant number of teachers in the district participating in the survey and each campus were female, with the exception of Campus 10 (52% male and 48% female) and Campus 13 (51.8% male and 48.2% female), that have about the same percentage of male and female teachers (see Table 4.2).

Table 4.2. Gender by School/Campus

<table>
<thead>
<tr>
<th>School</th>
<th>Male Frequency</th>
<th>Male Percent</th>
<th>Female Frequency</th>
<th>Female Percent</th>
</tr>
</thead>
<tbody>
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<td>30</td>
<td>85.7</td>
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<tr>
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<td>0</td>
<td>.0</td>
<td>27</td>
<td>100.0</td>
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<tr>
<td>Campus 3</td>
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<td>32</td>
<td>84.2</td>
</tr>
<tr>
<td>Campus 4</td>
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<td>17.2</td>
<td>24</td>
<td>82.8</td>
</tr>
<tr>
<td>Campus 5</td>
<td>12</td>
<td>30.8</td>
<td>27</td>
<td>69.2</td>
</tr>
<tr>
<td>Campus 6</td>
<td>4</td>
<td>10.8</td>
<td>33</td>
<td>89.2</td>
</tr>
<tr>
<td>Campus 7</td>
<td>2</td>
<td>5.4</td>
<td>35</td>
<td>94.6</td>
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<td>36</td>
<td>90.0</td>
</tr>
<tr>
<td>Campus 9</td>
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<td>33</td>
<td>89.2</td>
</tr>
<tr>
<td>Campus 10</td>
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<td>52.0</td>
<td>24</td>
<td>48.0</td>
</tr>
<tr>
<td>Campus 11</td>
<td>12</td>
<td>30.0</td>
<td>28</td>
<td>70.0</td>
</tr>
<tr>
<td>Campus 12</td>
<td>19</td>
<td>33.9</td>
<td>37</td>
<td>66.1</td>
</tr>
<tr>
<td>Campus 13</td>
<td>87</td>
<td>51.8</td>
<td>81</td>
<td>48.2</td>
</tr>
</tbody>
</table>

One hundred and forty-one (21.7%) participants had less than one year of experience, 126 (19.4%) less than three years, 149 (23.0%) less than six years, and 233 (35.9%) less than nine years (see Table 4.3); 41.1% of teachers surveyed have less than three years of experience.
### Table 4.3. Frequencies and Percents for Years of Experience by Campus

<table>
<thead>
<tr>
<th>School</th>
<th>Less than 1 year Frequency</th>
<th>Less than 1 year Percent</th>
<th>Less than 3 years Frequency</th>
<th>Less than 3 years Percent</th>
<th>Less than 6 years Frequency</th>
<th>Less than 6 years Percent</th>
<th>Less than 9 years Frequency</th>
<th>Less than 9 years Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Campus 1</td>
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<td>11.1</td>
<td>10</td>
<td>27.8</td>
<td>7</td>
<td>19.4</td>
<td>15</td>
<td>41.7</td>
</tr>
<tr>
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<td>6</td>
<td>22.2</td>
<td>4</td>
<td>14.8</td>
<td>10</td>
<td>37.0</td>
<td>7</td>
<td>25.9</td>
</tr>
<tr>
<td>Campus 3</td>
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<td>12.8</td>
<td>12</td>
<td>30.8</td>
<td>6</td>
<td>15.4</td>
<td>16</td>
<td>41.0</td>
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<td>Campus 4</td>
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<td>19.4</td>
<td>4</td>
<td>12.9</td>
<td>5</td>
<td>16.1</td>
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<td>35.0</td>
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<tr>
<td>Campus 6</td>
<td>4</td>
<td>10.5</td>
<td>9</td>
<td>23.7</td>
<td>13</td>
<td>34.2</td>
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<td>31.6</td>
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<td>Campus 8</td>
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<td>17.5</td>
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<td>37.5</td>
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<td>25.0</td>
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<td>Campus 9</td>
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<td>11.1</td>
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<td>13.9</td>
<td>15</td>
<td>41.7</td>
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<td>Campus 10</td>
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<td>23.5</td>
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</tr>
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<td>Campus 11</td>
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<td>23.6</td>
<td>16</td>
<td>29.1</td>
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<tr>
<td>Campus 13</td>
<td>48</td>
<td>28.4</td>
<td>27</td>
<td>16.0</td>
<td>31</td>
<td>18.3</td>
<td>63</td>
<td>37.3</td>
</tr>
</tbody>
</table>

Campus 3 (48.6% Anglo and 51.4% Hispanic), Campus 7 (44.7% Anglo and 50% Hispanic), and Campus 8 (47.4% Anglo and 44.7% Hispanic) have about the same number of Hispanic teachers as they have Anglo teachers. Campus 2 (59.3%), Campus 10 (54.9%), and Campus 13 (46.7% Anglo and 35.2% Hispanic) have more Anglo teachers than Hispanic. Campus 4 (62.5%), Campus 5 (73.8%), Campus 6 (59.5%), Campus 9 (57.1%), Campus 11 (56.8%), and Campus 12 (65.5%) have predominately Hispanic teachers (see Table 4.4).
<table>
<thead>
<tr>
<th>School</th>
<th>African American</th>
<th></th>
<th>Anglo</th>
<th></th>
<th>Hispanic</th>
<th></th>
<th>Other</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Frequency</td>
<td>Percent</td>
<td>Frequency</td>
<td>Percent</td>
<td>Frequency</td>
<td>Percent</td>
<td>Frequency</td>
<td>Percent</td>
</tr>
<tr>
<td>Campus 1</td>
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<td>2.9</td>
<td>19</td>
<td>54.3</td>
<td>14</td>
<td>40.0</td>
<td>1</td>
<td>2.9</td>
</tr>
<tr>
<td>Campus 2</td>
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<td>.0</td>
<td>16</td>
<td>59.3</td>
<td>7</td>
<td>25.9</td>
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<td>14.8</td>
</tr>
<tr>
<td>Campus 3</td>
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<td>.0</td>
<td>18</td>
<td>48.6</td>
<td>19</td>
<td>51.4</td>
<td>0</td>
<td>.0</td>
</tr>
<tr>
<td>Campus 4</td>
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<td>28.1</td>
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<td>9.4</td>
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<td>16.7</td>
<td>31</td>
<td>73.8</td>
<td>4</td>
<td>9.5</td>
</tr>
<tr>
<td>Campus 6</td>
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<td>12</td>
<td>32.4</td>
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<td>59.5</td>
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<td>5.4</td>
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<tr>
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</tr>
<tr>
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<td>47.4</td>
<td>17</td>
<td>44.7</td>
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<td>2.6</td>
</tr>
<tr>
<td>Campus 9</td>
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<td>.0</td>
<td>13</td>
<td>37.1</td>
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<td>57.1</td>
<td>2</td>
<td>5.7</td>
</tr>
<tr>
<td>Campus 10</td>
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<td>3.9</td>
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<td>54.9</td>
<td>18</td>
<td>35.3</td>
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<td>5.9</td>
</tr>
<tr>
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<td>2.7</td>
</tr>
<tr>
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<td>1.8</td>
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<td>29.1</td>
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<td>65.5</td>
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<td>3.6</td>
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<td>77</td>
<td>46.7</td>
<td>58</td>
<td>35.2</td>
<td>21</td>
<td>12.7</td>
</tr>
</tbody>
</table>

Campus 10 (43.1%), Campus 11 (45.2%), and Campus 13 (43.2%) have the most alternatively certified teachers (no column). Other campuses have predominately traditionally certified teachers (yes column) (see Table 4.5).
### Table 4.5. Frequency and Percent of Teacher Certification by Campus

<table>
<thead>
<tr>
<th>School</th>
<th>Yes Frequency</th>
<th>Yes Percent</th>
<th>No Frequency</th>
<th>No Percent</th>
</tr>
</thead>
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<td>11</td>
<td>30.6</td>
</tr>
<tr>
<td>Campus 2</td>
<td>18</td>
<td>69.2</td>
<td>8</td>
<td>30.8</td>
</tr>
<tr>
<td>Campus 3</td>
<td>28</td>
<td>71.8</td>
<td>11</td>
<td>28.2</td>
</tr>
<tr>
<td>Campus 4</td>
<td>21</td>
<td>67.7</td>
<td>10</td>
<td>32.3</td>
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<td>26.8</td>
</tr>
<tr>
<td>Campus 6</td>
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<td>67.6</td>
<td>12</td>
<td>32.4</td>
</tr>
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<td>Campus 7</td>
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<td>70.3</td>
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<td>29.7</td>
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<tr>
<td>Campus 13</td>
<td>96</td>
<td>56.8</td>
<td>73</td>
<td>43.2</td>
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</table>

All campuses show a majority of teachers on their campus did not have a mentor their first year of teaching (see Table 4.6). Campus 4 had the highest number of teachers not having a mentor their first year (83.9%) (see Table 4.6).
Table 4.6. Did the Teacher Have a Mentor His/Her First Year of Teaching (by Campus)?

<table>
<thead>
<tr>
<th>School</th>
<th>No Frequency</th>
<th>No Percent</th>
<th>Yes Frequency</th>
<th>Yes Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Campus 1</td>
<td>20</td>
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<td>14</td>
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</tr>
<tr>
<td>Campus 12</td>
<td>39</td>
<td>69.6</td>
<td>17</td>
<td>30.4</td>
</tr>
<tr>
<td>Campus 13</td>
<td>117</td>
<td>69.2</td>
<td>52</td>
<td>30.8</td>
</tr>
</tbody>
</table>

The majority of teachers taking the survey indicating they had a mentor did not find their mentor helpful (between 58.6% - 86.7%). Campus 4 was especially demonstrative in their response (86.7%) (see Table 4.7).

Table 4.7. Was the Mentor Assigned to the Teacher Helpful (by Campus)?

<table>
<thead>
<tr>
<th>School</th>
<th>No Frequency</th>
<th>No Percent</th>
<th>Yes Frequency</th>
<th>Yes Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Campus 1</td>
<td>16</td>
<td>59.3</td>
<td>11</td>
<td>40.7</td>
</tr>
<tr>
<td>Campus 2</td>
<td>12</td>
<td>60.0</td>
<td>8</td>
<td>40.0</td>
</tr>
<tr>
<td>Campus 3</td>
<td>21</td>
<td>70.0</td>
<td>9</td>
<td>30.0</td>
</tr>
<tr>
<td>Campus 4</td>
<td>26</td>
<td>86.7</td>
<td>4</td>
<td>13.3</td>
</tr>
<tr>
<td>Campus 5</td>
<td>25</td>
<td>67.6</td>
<td>12</td>
<td>32.4</td>
</tr>
<tr>
<td>Campus 6</td>
<td>24</td>
<td>75.0</td>
<td>8</td>
<td>25.0</td>
</tr>
<tr>
<td>Campus 7</td>
<td>21</td>
<td>70.0</td>
<td>9</td>
<td>30.0</td>
</tr>
<tr>
<td>Campus 8</td>
<td>22</td>
<td>68.8</td>
<td>10</td>
<td>31.3</td>
</tr>
<tr>
<td>Campus 9</td>
<td>17</td>
<td>58.6</td>
<td>12</td>
<td>41.4</td>
</tr>
<tr>
<td>Campus 10</td>
<td>29</td>
<td>67.4</td>
<td>14</td>
<td>32.6</td>
</tr>
<tr>
<td>Campus 11</td>
<td>22</td>
<td>64.7</td>
<td>12</td>
<td>35.3</td>
</tr>
<tr>
<td>Campus 12</td>
<td>34</td>
<td>69.4</td>
<td>15</td>
<td>30.6</td>
</tr>
<tr>
<td>Campus 13</td>
<td>95</td>
<td>64.2</td>
<td>53</td>
<td>35.8</td>
</tr>
</tbody>
</table>
Most teachers participating in the survey came from campuses where there were more mentor teachers than non-mentor. The exceptions were Campus 4 (65.6%), Campus 6 (52.6%), and Campus 10 (56.0%) that predominately had teachers who had not been a mentor. Three campuses had a more or less equal number of mentor and non-mentor teachers participating in the survey (see Table 4.8).

Table 4.8. Have You Served as a Mentor to a Teacher (by Campus)?

<table>
<thead>
<tr>
<th>School</th>
<th>I am a Mentor</th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Frequency</td>
<td>Percent</td>
<td>Frequency</td>
<td>Percent</td>
<td></td>
</tr>
<tr>
<td>Campus 1</td>
<td>12</td>
<td>33.3</td>
<td>24</td>
<td>66.7</td>
<td></td>
</tr>
<tr>
<td>Campus 2</td>
<td>12</td>
<td>46.2</td>
<td>14</td>
<td>53.8</td>
<td></td>
</tr>
<tr>
<td>Campus 3</td>
<td>17</td>
<td>43.6</td>
<td>22</td>
<td>56.4</td>
<td></td>
</tr>
<tr>
<td>Campus 4</td>
<td>21</td>
<td>65.6</td>
<td>11</td>
<td>34.4</td>
<td></td>
</tr>
<tr>
<td>Campus 5</td>
<td>16</td>
<td>38.1</td>
<td>26</td>
<td>61.9</td>
<td></td>
</tr>
<tr>
<td>Campus 6</td>
<td>20</td>
<td>52.6</td>
<td>18</td>
<td>47.4</td>
<td></td>
</tr>
<tr>
<td>Campus 7</td>
<td>18</td>
<td>50.0</td>
<td>18</td>
<td>50.0</td>
<td></td>
</tr>
<tr>
<td>Campus 8</td>
<td>14</td>
<td>35.0</td>
<td>26</td>
<td>65.0</td>
<td></td>
</tr>
<tr>
<td>Campus 9</td>
<td>13</td>
<td>39.4</td>
<td>20</td>
<td>60.6</td>
<td></td>
</tr>
<tr>
<td>Campus 10</td>
<td>28</td>
<td>56.0</td>
<td>22</td>
<td>44.0</td>
<td></td>
</tr>
<tr>
<td>Campus 11</td>
<td>18</td>
<td>45.0</td>
<td>22</td>
<td>55.0</td>
<td></td>
</tr>
<tr>
<td>Campus 12</td>
<td>23</td>
<td>42.6</td>
<td>31</td>
<td>57.4</td>
<td></td>
</tr>
<tr>
<td>Campus 13</td>
<td>82</td>
<td>48.8</td>
<td>86</td>
<td>51.2</td>
<td></td>
</tr>
</tbody>
</table>

Internal Consistency of Survey Instrument

Cronbach’s alphas were conducted to measure the internal consistency or reliability of the survey instrument used for the study for this sample of teachers/campuses. Cronbach’s alpha is a test of reliability technique that requires only a single survey administration to provide a unique estimate of the reliability for a given survey/test. Cronbach’s alpha is the average value of the reliability coefficients one would obtain for all possible combinations of items when split into two half-tests.
(Cronbach & Gleser, 1957). The alpha levels, for this study, are quite good considering .70 is the cutoff value for being acceptable.

With good alpha levels, the individuals’ scores were combined to create overall teacher scores in the survey areas. The survey topic of Teachers’ Sense of Self-Efficacy Scale included the subscales of student engagement, instructional strategies, and classroom management. For example, the first 8 questions of the Teachers’ Sense of Efficacy Scale (TSES) were added together to create the Student Engagement score (using sums not averages). The survey topic of Omnibus-T Scale included the subscales of trust in principal, trust in colleagues, and trust in clients. For example, in the Omnibus T-Scale, the first 8 questions were added together to create trust in principal scores; the survey topic of Collective Efficacy had no subscales. Trust in clients was a score based on 10 questions. The Collective Efficacy used all 21 items (had no subscales). Means, standard deviations, and Cronbach’s alphas for composite research variables are presented in Table 4.9.

<table>
<thead>
<tr>
<th>Research Variable</th>
<th>M</th>
<th>SD</th>
<th>α</th>
<th>Items</th>
</tr>
</thead>
<tbody>
<tr>
<td>Student Engagement</td>
<td>32.79</td>
<td>4.37</td>
<td>.882</td>
<td>8</td>
</tr>
<tr>
<td>Instructional Strategies</td>
<td>34.20</td>
<td>4.18</td>
<td>.908</td>
<td>8</td>
</tr>
<tr>
<td>Classroom Management</td>
<td>34.96</td>
<td>4.04</td>
<td>.895</td>
<td>8</td>
</tr>
<tr>
<td>Trust in Principal</td>
<td>4.56</td>
<td>1.08</td>
<td>.933</td>
<td>8</td>
</tr>
<tr>
<td>Trust in Colleagues</td>
<td>4.51</td>
<td>0.84</td>
<td>.922</td>
<td>8</td>
</tr>
<tr>
<td>Trust in Clients</td>
<td>3.98</td>
<td>0.75</td>
<td>.889</td>
<td>10</td>
</tr>
<tr>
<td>Collective Efficacy</td>
<td>89.78</td>
<td>13.06</td>
<td>.884</td>
<td>21</td>
</tr>
</tbody>
</table>
Research Question 1

To examine research question 1, “What are the scores for each campus, and are there any differences among campus scores on the following surveys: Teachers’ Sense of Efficacy Scale (TSES-which contains the subscales of Student Engagement, Instructional Strategies, and Classroom Management), Collective Efficacy Scale (CE-Scale), and Omnibus T-Scale (OTS-which contains the subscales Trust in Principal, Trust in Clients, Trust in Colleagues)?” a multivariate analysis of variance (MANOVA) was conducted to assess if differences exist in the TSES subscales of student engagement, instructional strategies, classroom management, OTS subscales of trust in principal, trust in colleagues, trust in clients, and collective efficacy between schools (Campus 1 vs. Campus 2 vs. Campus 3 vs. Campus 4 vs. Campus 5 vs. Campus 6 vs. Campus 7 vs. Campus 8 vs. Campus 9 vs. Campus 10 vs. Campus 11 vs. Campus 12 vs. Campus 13). The results of the MANOVA were significant, $F(84, 3248) = 3.62, p < .001$ (partial $\eta^2 = 0.26$, power = 0.99), suggesting that simultaneous differences exist in the dependent variables between schools.

When this MANOVA was identified as significant, separate analyses of variance (ANOVA’s) ensued for individual dependent variables. Table 4.10 presents MANOVA’s on student engagement, instructional strategies, classroom management, trust in principal, trust in colleagues, trust in clients, and collective efficacy between schools. Significant differences were revealed on student engagement, trust in principal, trust in colleagues, trust in clients, and collective efficacy between schools. There were not significant differences found in instructional strategies and classroom management.
Table 4.10. MANOVA Comparison of Teacher Survey Responses Across Campuses

<table>
<thead>
<tr>
<th>Dependent Variable</th>
<th>F</th>
<th>P</th>
<th>Partial η²</th>
<th>Power</th>
</tr>
</thead>
<tbody>
<tr>
<td>Teachers' Sense of Self Efficacy</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Student Engagement</td>
<td>3.39</td>
<td>.001*</td>
<td>0.08</td>
<td>0.99</td>
</tr>
<tr>
<td>Instructional Strategies</td>
<td>1.56</td>
<td>.099</td>
<td>0.04</td>
<td>0.83</td>
</tr>
<tr>
<td>Classroom Management</td>
<td>1.24</td>
<td>.252</td>
<td>0.03</td>
<td>0.71</td>
</tr>
<tr>
<td>Omnibus-T Scale</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Trust in Principal</td>
<td>7.99</td>
<td>.001*</td>
<td>0.17</td>
<td>0.99</td>
</tr>
<tr>
<td>Trust in Colleagues</td>
<td>3.47</td>
<td>.001*</td>
<td>0.08</td>
<td>0.99</td>
</tr>
<tr>
<td>Trust in Clients</td>
<td>5.71</td>
<td>.001*</td>
<td>0.13</td>
<td>0.99</td>
</tr>
<tr>
<td>CE-Scale</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Collective Efficacy</td>
<td>6.31</td>
<td>.001*</td>
<td>0.14</td>
<td>0.99</td>
</tr>
</tbody>
</table>

*p < .001.

After determining there were significant differences between the dependent variables, Scheffé post hoc tests were conducted to examine where mean differences lie and revealed that on student engagement, Campus 7 (largest mean difference of all campuses) had a larger mean difference compared to Campus 10 (lowest mean difference of all campuses) (see Table 4.11).

Analysis of instructional strategies and classroom management revealed no significant difference between campuses. For trust in principal, Campus 2 (lowest mean difference of all campuses) had a smaller mean difference compared to Campus 5 (largest mean difference of all campuses) (see Table 4.12, Note a). Also for trust in principal, Campus 9 had a smaller mean difference compared to most of the other campuses participating in the survey (see Table 4.12, Note b). In addition, for trust in principal, it is interesting to note Campus 11 had a lower mean difference compared to other secondary campuses (Campus 10, Campus 12, and Campus 13) (see Table 4.12, Note c).
Table 4.11. Means and Standard Deviations on Student Engagement Between Schools

<table>
<thead>
<tr>
<th>School</th>
<th>M</th>
<th>SD</th>
</tr>
</thead>
<tbody>
<tr>
<td>Campus 1</td>
<td>33.21</td>
<td>3.57</td>
</tr>
<tr>
<td>Campus 2</td>
<td>33.67</td>
<td>4.05</td>
</tr>
<tr>
<td>Campus 3</td>
<td>34.27</td>
<td>4.82</td>
</tr>
<tr>
<td>Campus 4</td>
<td>35.46</td>
<td>3.35</td>
</tr>
<tr>
<td>Campus 5</td>
<td>33.74</td>
<td>4.37</td>
</tr>
<tr>
<td>Campus 6</td>
<td>32.96</td>
<td>4.00</td>
</tr>
<tr>
<td>Campus 7</td>
<td>35.54</td>
<td>3.71</td>
</tr>
<tr>
<td>Campus 8</td>
<td>33.55</td>
<td>3.59</td>
</tr>
<tr>
<td>Campus 9</td>
<td>32.62</td>
<td>4.40</td>
</tr>
<tr>
<td>Campus 10</td>
<td>30.46</td>
<td>3.87</td>
</tr>
<tr>
<td>Campus 11</td>
<td>31.97</td>
<td>3.82</td>
</tr>
<tr>
<td>Campus 12</td>
<td>32.24</td>
<td>4.56</td>
</tr>
<tr>
<td>Campus 13</td>
<td>32.42</td>
<td>4.91</td>
</tr>
<tr>
<td>Total</td>
<td>32.95</td>
<td>4.42</td>
</tr>
</tbody>
</table>

a=Significant difference between low-score school and other schools.

Table 4.12. Means and Standard Deviations on Trust in Principal Between Schools

<table>
<thead>
<tr>
<th>School</th>
<th>M</th>
<th>SD</th>
</tr>
</thead>
<tbody>
<tr>
<td>Campus 1</td>
<td>4.63</td>
<td>0.88</td>
</tr>
<tr>
<td>Campus 2</td>
<td>3.40</td>
<td>1.29</td>
</tr>
<tr>
<td>Campus 3</td>
<td>4.79</td>
<td>1.37</td>
</tr>
<tr>
<td>Campus 4</td>
<td>4.76</td>
<td>0.86</td>
</tr>
<tr>
<td>Campus 5</td>
<td>5.29</td>
<td>0.65</td>
</tr>
<tr>
<td>Campus 6</td>
<td>4.31</td>
<td>1.00</td>
</tr>
<tr>
<td>Campus 7</td>
<td>5.21</td>
<td>0.95</td>
</tr>
<tr>
<td>Campus 8</td>
<td>4.24</td>
<td>0.78</td>
</tr>
<tr>
<td>Campus 9</td>
<td>3.62</td>
<td>1.29</td>
</tr>
<tr>
<td>Campus 10</td>
<td>4.81</td>
<td>0.98</td>
</tr>
<tr>
<td>Campus 11</td>
<td>4.16</td>
<td>0.94</td>
</tr>
<tr>
<td>Campus 12</td>
<td>4.68</td>
<td>0.89</td>
</tr>
<tr>
<td>Campus 13</td>
<td>4.70</td>
<td>1.00</td>
</tr>
<tr>
<td>Total</td>
<td>4.57</td>
<td>1.08</td>
</tr>
</tbody>
</table>

a,b,c=Significant difference between low-score school and other schools.
For trust in colleagues, Campus 7 (largest mean difference of all campuses) had a larger mean difference compared to Campus 11 (lowest mean difference of all campuses) (see Table 4.13). For trust in clients, Campus 7 (largest mean difference of all campuses) had a larger mean difference compared to Campus 10, Campus 12, Campus 11 and Campus 13 (lowest mean differences of all campuses) (see Table 4.14). For collective efficacy, Campus 7 (largest mean difference of all campuses) had a larger mean difference compared to Campus 4 (lowest mean differences of all campuses), Campus 8, Campus 12, and Campus 13 (low mean differences compared to other campuses) (see Table 4.15).

Table 4.13. Means and Standard Deviations on Trust in Colleagues Between Schools

<table>
<thead>
<tr>
<th>School</th>
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</tr>
</thead>
<tbody>
<tr>
<td>Campus 1</td>
<td>4.30</td>
<td>0.92</td>
</tr>
<tr>
<td>Campus 2</td>
<td>4.90</td>
<td>0.71</td>
</tr>
<tr>
<td>Campus 3</td>
<td>4.65</td>
<td>0.71</td>
</tr>
<tr>
<td>Campus 4</td>
<td>4.48</td>
<td>0.94</td>
</tr>
<tr>
<td>Campus 5</td>
<td>4.71</td>
<td>0.71</td>
</tr>
<tr>
<td>Campus 6</td>
<td>4.48</td>
<td>0.75</td>
</tr>
<tr>
<td>Campus 7</td>
<td>5.21a</td>
<td>0.80</td>
</tr>
<tr>
<td>Campus 8</td>
<td>4.22</td>
<td>0.80</td>
</tr>
<tr>
<td>Campus 9</td>
<td>4.43</td>
<td>1.08</td>
</tr>
<tr>
<td>Campus 10</td>
<td>4.60</td>
<td>0.79</td>
</tr>
<tr>
<td>Campus 11</td>
<td>4.16a</td>
<td>0.81</td>
</tr>
<tr>
<td>Campus 12</td>
<td>4.36</td>
<td>0.71</td>
</tr>
<tr>
<td>Campus 13</td>
<td>4.47</td>
<td>0.79</td>
</tr>
<tr>
<td>Total</td>
<td>4.51</td>
<td>0.83</td>
</tr>
</tbody>
</table>

*a=Significant difference between low-score school and other schools.
### Table 4.14. Means and Standard Deviations on Trust in Clients Between Schools

<table>
<thead>
<tr>
<th>School</th>
<th>M</th>
<th>SD</th>
</tr>
</thead>
<tbody>
<tr>
<td>Campus 1</td>
<td>4.22</td>
<td>0.72</td>
</tr>
<tr>
<td>Campus 2</td>
<td>4.28</td>
<td>0.68</td>
</tr>
<tr>
<td>Campus 3</td>
<td>4.30</td>
<td>0.77</td>
</tr>
<tr>
<td>Campus 4</td>
<td>3.96</td>
<td>0.58</td>
</tr>
<tr>
<td>Campus 5</td>
<td>4.15</td>
<td>0.79</td>
</tr>
<tr>
<td>Campus 6</td>
<td>3.99</td>
<td>0.80</td>
</tr>
<tr>
<td>Campus 7</td>
<td>4.73&lt;sub&gt;a&lt;/sub&gt;</td>
<td>0.48</td>
</tr>
<tr>
<td>Campus 8</td>
<td>3.94</td>
<td>0.72</td>
</tr>
<tr>
<td>Campus 9</td>
<td>4.09</td>
<td>0.67</td>
</tr>
<tr>
<td>Campus 10</td>
<td>3.81&lt;sub&gt;a&lt;/sub&gt;</td>
<td>0.74</td>
</tr>
<tr>
<td>Campus 11</td>
<td>3.94&lt;sub&gt;a&lt;/sub&gt;</td>
<td>0.64</td>
</tr>
<tr>
<td>Campus 12</td>
<td>3.81&lt;sub&gt;a&lt;/sub&gt;</td>
<td>0.72</td>
</tr>
<tr>
<td>Campus 13</td>
<td>3.68&lt;sub&gt;a&lt;/sub&gt;</td>
<td>0.78</td>
</tr>
<tr>
<td>Total</td>
<td>3.98</td>
<td>0.77</td>
</tr>
</tbody>
</table>

*<sub>a</sub>=Significant difference between high-score school and other schools.*

### Table 4.15. Means and Standard Deviations on Collective Efficacy Between Schools

<table>
<thead>
<tr>
<th>School</th>
<th>M</th>
<th>SD</th>
</tr>
</thead>
<tbody>
<tr>
<td>Campus 1</td>
<td>92.21</td>
<td>12.20</td>
</tr>
<tr>
<td>Campus 2</td>
<td>98.57</td>
<td>11.21</td>
</tr>
<tr>
<td>Campus 3</td>
<td>95.40</td>
<td>11.40</td>
</tr>
<tr>
<td>Campus 4</td>
<td>85.33&lt;sub&gt;a&lt;/sub&gt;</td>
<td>14.00</td>
</tr>
<tr>
<td>Campus 5</td>
<td>91.29</td>
<td>11.43</td>
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<tr>
<td>Campus 6</td>
<td>90.44</td>
<td>14.51</td>
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<tr>
<td>Campus 7</td>
<td>103.85&lt;sub&gt;a&lt;/sub&gt;</td>
<td>8.41</td>
</tr>
<tr>
<td>Campus 8</td>
<td>86.72&lt;sub&gt;a&lt;/sub&gt;</td>
<td>11.90</td>
</tr>
<tr>
<td>Campus 9</td>
<td>90.23</td>
<td>14.05</td>
</tr>
<tr>
<td>Campus 10</td>
<td>89.51</td>
<td>10.15</td>
</tr>
<tr>
<td>Campus 11</td>
<td>88.77</td>
<td>11.31</td>
</tr>
<tr>
<td>Campus 12</td>
<td>87.17&lt;sub&gt;a&lt;/sub&gt;</td>
<td>13.15</td>
</tr>
<tr>
<td>Campus 13</td>
<td>84.93&lt;sub&gt;a&lt;/sub&gt;</td>
<td>13.69</td>
</tr>
<tr>
<td>Total</td>
<td>89.65</td>
<td>13.31</td>
</tr>
</tbody>
</table>

*<sub>a</sub>=Significant difference between high-score school and other schools.*
Research Question 2

Gender

A MANOVA on the seven dependent variables by gender was conducted. The gender variable only has two groups (male, female). As a result, any significant difference in the ANOVA’s for gender will further be a significant difference between males and females. No Scheffé post hoc test will be conducted for the further analysis of gender differences.

The results of the MANOVA were significant, $F (7, 463) = 6.13, p < .001$ (partial $\eta^2 = 0.08$, power = 0.99), suggesting that simultaneous differences exist in the dependent variables between gender. Univariate ANOVA’s (Table 4.16) revealed differences on trust in clients (Females M=4.05, SD=.72; Males M=3.76, SD=.82, $p < .001$), collective efficacy (Females M=90.75, SD=13.35; Males M=86.60, SD=12.19, $p < .05$), and trust in principal (Females M=4.64, SD=.99; Males M=4.34, SD=1.22, $p < .05$) where females had statistically higher scores than males in all three categories.

Table 4.16. ANOVA’s on Gender and Survey Responses (Yes vs. No)

<table>
<thead>
<tr>
<th>Dependent Variable</th>
<th>$F$</th>
<th>$P$</th>
<th>Partial $\eta^2$</th>
<th>Power</th>
</tr>
</thead>
<tbody>
<tr>
<td>Student Engagement</td>
<td>6.120</td>
<td>.014*</td>
<td>.013</td>
<td>.695</td>
</tr>
<tr>
<td>Instructional Strategies</td>
<td>2.870</td>
<td>.090</td>
<td>.006</td>
<td>.395</td>
</tr>
<tr>
<td>Classroom Management</td>
<td>.026</td>
<td>.871</td>
<td>.000</td>
<td>.053</td>
</tr>
<tr>
<td>Trust in Principal</td>
<td>7.680</td>
<td>.006**</td>
<td>.016</td>
<td>.790</td>
</tr>
<tr>
<td>Trust in Colleagues</td>
<td>.330</td>
<td>.564</td>
<td>.001</td>
<td>.089</td>
</tr>
<tr>
<td>Trust in Clients</td>
<td>14.950</td>
<td>.001**</td>
<td>.031</td>
<td>.971</td>
</tr>
<tr>
<td>Collective Efficacy</td>
<td>9.750</td>
<td>.002**</td>
<td>.020</td>
<td>.876</td>
</tr>
</tbody>
</table>

*p $\leq .05$.

**p $\leq .01$. 
To examine research question 2, a multivariate analysis of variance (MANOVA) was conducted to assess if differences exist in student engagement, instructional strategies, classroom management, trust in principal, trust in colleagues, trust in clients, and collective efficacy between years of experience (1-3 years vs. 4-6 years vs. 7-12 years vs. 12 or more years). The results of the MANOVA were significant, $F(21, 1410) = 2.21, p < .001$ (partial $\eta^2 = 0.03$, power = 0.99), suggesting that simultaneous differences exist in the dependent variables between years of experience.

When this MANOVA was identified as significant, separate analyses of variance (ANOVA’s) ensued for individual dependent variables. Table 4.17 presents ANOVA’s on student engagement, instructional strategies, classroom management, trust in principal, trust in colleagues, trust in clients, and collective efficacy between years of experience. Significant differences were revealed between trust in colleagues and years of experience.

<table>
<thead>
<tr>
<th>Dependent Variable</th>
<th>$F$</th>
<th>$p$</th>
<th>Partial $\eta^2$</th>
<th>Power</th>
</tr>
</thead>
<tbody>
<tr>
<td>Student Engagement</td>
<td>2.20</td>
<td>.088</td>
<td>0.01</td>
<td>0.56</td>
</tr>
<tr>
<td>Instructional Strategies</td>
<td>1.24</td>
<td>.296</td>
<td>0.01</td>
<td>0.33</td>
</tr>
<tr>
<td>Classroom Management</td>
<td>1.65</td>
<td>.178</td>
<td>0.10</td>
<td>0.43</td>
</tr>
<tr>
<td>Trust in Principal</td>
<td>1.19</td>
<td>.313</td>
<td>0.01</td>
<td>0.32</td>
</tr>
<tr>
<td>Trust in Colleagues</td>
<td>5.30</td>
<td>.001*</td>
<td>0.03</td>
<td>0.93</td>
</tr>
<tr>
<td>Trust in Clients</td>
<td>2.54</td>
<td>.056</td>
<td>0.02</td>
<td>0.63</td>
</tr>
<tr>
<td>Collective Efficacy</td>
<td>2.14</td>
<td>.094</td>
<td>0.01</td>
<td>0.55</td>
</tr>
</tbody>
</table>

*p ≤ .001.
After determining there were significant differences between the dependent variables, Scheffé post hoc tests were conducted to examine where mean differences lie. The results of trust in colleagues by years’ experience; post hoc analyses revealed that both those with 1-3 years (M=4.68, SD=.89) and those with 7-12 years (M=4.57, SD=.78) had greater trust in colleagues’ scores than those with 4-6 years (M=4.22, SD=.83) (see Table 4.18). All other comparisons were not significantly different.

Table 4.18. Scheffé Post Hoc Results for Years of Experience and Trust in Colleagues (Yes vs. No)

<table>
<thead>
<tr>
<th>Variable</th>
<th>Years of Experience</th>
<th>M</th>
<th>SD</th>
<th>4-6 years</th>
<th>7-12 years</th>
<th>P</th>
</tr>
</thead>
<tbody>
<tr>
<td>Trust in Colleagues</td>
<td>1-3 years</td>
<td>4.68</td>
<td>0.89</td>
<td></td>
<td></td>
<td>&lt;.001</td>
</tr>
<tr>
<td></td>
<td>4-6 years</td>
<td>4.22</td>
<td>0.83</td>
<td></td>
<td></td>
<td>&lt;.05</td>
</tr>
<tr>
<td></td>
<td>7-12 years</td>
<td>4.57</td>
<td>0.78</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>12 or more years</td>
<td>4.49</td>
<td>0.82</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>4.50</td>
<td>0.84</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*Note. All other p values were not significant.*

**Ethnicity**

A multivariate analysis of variance (MANOVA) was conducted to assess if differences exist in student engagement, instructional strategies, classroom management, trust in principal, trust in colleagues, trust in clients, and collective efficacy between ethnicity (African American vs. Anglo vs. Hispanic vs. Other). The results of the MANOVA were significant, $F (21, 1377) = 3.00, p < .001$ (partial $\eta^2 = 0.04$, power = 0.99), suggesting that simultaneous differences exist in the dependent variables between ethnicity.

When this MANOVA was identified as significant, separate analyses of variance (ANOVA’s) ensued for individual dependent variables. Table 4.19 presents ANOVA’s
on student engagement, instructional strategies, classroom management, trust in principal, trust in colleagues, trust in clients, and collective efficacy among ethnicity.

Significant differences were revealed between ethnicity groups in student engagement, \( F(3, 1377) = 7.86, p < .01 \) (partial \( \eta^2 = 0.05 \), power = 0.99), and collective efficacy, \( F(3, 1377) = 3.94, p < .01 \) (partial \( \eta^2 = 0.03 \), power = 0.83).

Table 4.19. ANOVA’s on Ethnicity and Survey Responses (Yes vs. No)

<table>
<thead>
<tr>
<th>Dependent Variable</th>
<th>( F )</th>
<th>( p )</th>
<th>Partial ( \eta^2 )</th>
<th>Power</th>
</tr>
</thead>
<tbody>
<tr>
<td>Student Engagement</td>
<td>7.86</td>
<td>.001*</td>
<td>0.05</td>
<td>0.99</td>
</tr>
<tr>
<td>Instructional Strategies</td>
<td>2.35</td>
<td>.072</td>
<td>0.02</td>
<td>0.59</td>
</tr>
<tr>
<td>Classroom Management</td>
<td>2.60</td>
<td>.051</td>
<td>0.02</td>
<td>0.64</td>
</tr>
<tr>
<td>Trust in Principal</td>
<td>2.06</td>
<td>.105</td>
<td>0.01</td>
<td>0.53</td>
</tr>
<tr>
<td>Trust in Colleagues</td>
<td>0.93</td>
<td>.425</td>
<td>0.01</td>
<td>0.26</td>
</tr>
<tr>
<td>Trust in Clients</td>
<td>2.22</td>
<td>.085</td>
<td>0.01</td>
<td>0.56</td>
</tr>
<tr>
<td>Collective Efficacy</td>
<td>3.94</td>
<td>.009*</td>
<td>0.03</td>
<td>0.83</td>
</tr>
</tbody>
</table>

\*\( p < .01 \).

Scheffé post hoc tests were conducted on student engagement to examine where means differences are found between ethnicity groups. As seen in Table 4.20 Anglos (\( M=31.92, SD=4.44 \)) had a smaller mean difference compared to Hispanics (\( M=33.82, SD=4.28, p<.05 \)) in student engagement. African Americans (\( M=35.33, SD=3.28, p<.05 \)) had a larger mean difference compared to the other ethnicity groups on student engagement. Means and standard deviations are presented in Table 4.20.
Table 4.20. Scheffé Post Hoc Results for Ethnicity in Student Engagement (Yes vs. No)

<table>
<thead>
<tr>
<th>Ethnicity</th>
<th>M</th>
<th>SD</th>
<th>Anglo</th>
<th>Hispanic</th>
<th>Other</th>
</tr>
</thead>
<tbody>
<tr>
<td>African American</td>
<td>35.33</td>
<td>3.28</td>
<td><em>p &lt; .05</em></td>
<td><em>p &lt; .05</em></td>
<td><em>p &lt; .05</em></td>
</tr>
<tr>
<td>Anglo</td>
<td>31.92</td>
<td>4.44</td>
<td></td>
<td></td>
<td><em>p &lt; .05</em></td>
</tr>
<tr>
<td>Hispanic</td>
<td>33.82</td>
<td>4.28</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Other</td>
<td>32.97</td>
<td>4.22</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>32.99</td>
<td>4.42</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*Note.* All other *p* values were not significant.

**Teacher Certification**

The results of the MANOVA were not significant, *F (7, 469) = 0.78*, *p < .759* (partial η² = 0.01, power = 0.33), suggesting that differences do not exist in the dependent variables between teacher certification. The ANOVA’s (Table 4.21) show no statistical difference on the research variables by teacher certification.

Table 4.21. ANOVA’s on Research Variables by Teacher Certification (Yes vs. No)

<table>
<thead>
<tr>
<th>Dependent Variable</th>
<th><em>F</em></th>
<th><em>p</em></th>
<th>Partial η²</th>
<th>Power</th>
</tr>
</thead>
<tbody>
<tr>
<td>Student Engagement</td>
<td>.214</td>
<td>.644</td>
<td>.000</td>
<td>.075</td>
</tr>
<tr>
<td>Instructional Strategies</td>
<td>.421</td>
<td>.517</td>
<td>.001</td>
<td>.099</td>
</tr>
<tr>
<td>Classroom Management</td>
<td>.671</td>
<td>.413</td>
<td>.001</td>
<td>.129</td>
</tr>
<tr>
<td>Trust in Principal</td>
<td>.154</td>
<td>.695</td>
<td>.000</td>
<td>.068</td>
</tr>
<tr>
<td>Trust in Colleagues</td>
<td>.200</td>
<td>.655</td>
<td>.000</td>
<td>.073</td>
</tr>
<tr>
<td>Trust in Clients</td>
<td>.603</td>
<td>.438</td>
<td>.001</td>
<td>.121</td>
</tr>
<tr>
<td>Collective Efficacy</td>
<td>.386</td>
<td>.535</td>
<td>.001</td>
<td>.095</td>
</tr>
</tbody>
</table>

**Mentor First Year**

The results of the MANOVA were significant, *F (7, 467) = 4.08*, *p < .001* (partial η² = 0.06, power = 0.99), suggesting that simultaneous differences exist in the dependent variables between mentor first year. ANOVA’s are presented in Table 4.22. The mentor
variable only has two levels, so further Scheffé post hoc analysis is not warranted. Those who were not assigned mentors their first year of teaching (M=32.09, SD=4.52) had lower student engagement scores than those who did have mentors (M=33.38, SD=4.30, \( p < .05 \)), and those who had mentors the first year (M=4.36, SD=1.12) had lower trust in principals’ scores than those who did not have mentors (M=4.66, 1.05, \( p < .05 \)).

Table 4.22. ANOVA’s on Research Variables by Mentor First Year (Yes vs. No)

<table>
<thead>
<tr>
<th>Dependent Variable</th>
<th>( F )</th>
<th>( p )</th>
<th>Partial ( \eta^2 )</th>
<th>Power</th>
</tr>
</thead>
<tbody>
<tr>
<td>Student Engagement</td>
<td>8.94</td>
<td>.003</td>
<td>.019</td>
<td>.847</td>
</tr>
<tr>
<td>Instructional Strategies</td>
<td>1.13</td>
<td>.288</td>
<td>.002</td>
<td>.186</td>
</tr>
<tr>
<td>Classroom Management</td>
<td>.66</td>
<td>.416</td>
<td>.001</td>
<td>.128</td>
</tr>
<tr>
<td>Trust in Principal</td>
<td>8.20</td>
<td>.004</td>
<td>.017</td>
<td>.815</td>
</tr>
<tr>
<td>Trust in Colleagues</td>
<td>3.04</td>
<td>.082</td>
<td>.006</td>
<td>.413</td>
</tr>
<tr>
<td>Trust in Clients</td>
<td>.02</td>
<td>.876</td>
<td>.000</td>
<td>.053</td>
</tr>
<tr>
<td>Collective Efficacy</td>
<td>.94</td>
<td>.333</td>
<td>.002</td>
<td>.162</td>
</tr>
</tbody>
</table>

Helpful Mentor

The results of the MANOVA were significant, \( F (7, 393) = 2.89, p < .006 \) (partial \( \eta^2 = 0.05 \), power = 0.93), suggesting that simultaneous differences exist in the dependent variables between mentor helpful. ANOVA’s are presented in Table 4.23. The category of helpful mentor only had two categories; there was not a Scheffé post hoc analysis. Those with a helpful mentor had greater student engagement scores, classroom management scores, trust in principal scores, and collective efficacy scores compared to those who said the mentor was not helpful (Table 4.24).
### Table 4.23. ANOVA’s on Research Variables by Mentor Helpful (Yes vs. No)

<table>
<thead>
<tr>
<th>Dependent Variable</th>
<th>$F$</th>
<th>$p$</th>
<th>Partial $\eta^2$</th>
<th>Power</th>
</tr>
</thead>
<tbody>
<tr>
<td>Student Engagement</td>
<td>9.85</td>
<td>.002</td>
<td>.024</td>
<td>.879</td>
</tr>
<tr>
<td>Instructional Strategies</td>
<td>2.83</td>
<td>.093</td>
<td>.007</td>
<td>.389</td>
</tr>
<tr>
<td>Classroom Management</td>
<td>5.50</td>
<td>.020</td>
<td>.014</td>
<td>.648</td>
</tr>
<tr>
<td>Trust in Principal</td>
<td>6.83</td>
<td>.009</td>
<td>.017</td>
<td>.741</td>
</tr>
<tr>
<td>Trust in Colleagues</td>
<td>3.18</td>
<td>.075</td>
<td>.008</td>
<td>.429</td>
</tr>
<tr>
<td>Trust in Clients</td>
<td>1.84</td>
<td>.175</td>
<td>.005</td>
<td>.273</td>
</tr>
<tr>
<td>Collective Efficacy</td>
<td>5.62</td>
<td>.018</td>
<td>.014</td>
<td>.658</td>
</tr>
</tbody>
</table>

### Table 4.24. Scheffé Post Hoc Results by Mentor Helpful (Yes vs. No)

<table>
<thead>
<tr>
<th>Research Variable</th>
<th>Helpful Mentor</th>
<th>M</th>
<th>SD</th>
<th>$p$</th>
<th>N</th>
</tr>
</thead>
<tbody>
<tr>
<td>Student Engagement</td>
<td>Yes</td>
<td>33.52</td>
<td>4.27</td>
<td>$p&lt;.05$</td>
<td>266</td>
</tr>
<tr>
<td></td>
<td>No</td>
<td>32.06</td>
<td>4.64</td>
<td></td>
<td>135</td>
</tr>
<tr>
<td>Classroom Management</td>
<td>Yes</td>
<td>35.44</td>
<td>3.88</td>
<td>$p&lt;.05$</td>
<td>266</td>
</tr>
<tr>
<td></td>
<td>No</td>
<td>34.45</td>
<td>4.19</td>
<td></td>
<td>135</td>
</tr>
<tr>
<td>Trust Principal</td>
<td>Yes</td>
<td>4.71</td>
<td>1.01</td>
<td>$p&lt;.05$</td>
<td>266</td>
</tr>
<tr>
<td></td>
<td>No</td>
<td>4.43</td>
<td>1.06</td>
<td></td>
<td>135</td>
</tr>
<tr>
<td>Collective Efficacy</td>
<td>Yes</td>
<td>90.67</td>
<td>12.75</td>
<td>$p&lt;.05$</td>
<td>266</td>
</tr>
<tr>
<td></td>
<td>No</td>
<td>87.36</td>
<td>14.11</td>
<td></td>
<td>135</td>
</tr>
</tbody>
</table>

**I Am a Mentor**

The results of the MANOVA were significant, $F(7, 465) = 3.84, p < .001$ (partial $\eta^2 = 0.06$, power = 0.98), suggesting that simultaneous differences exist in the dependent variables between I am a mentor (yes vs. no). The ANOVA’s on the research variables by I am a mentor revealed three statistical differences (Table 4.25). Results showed that student engagement $F(1, 465) = 9.16, p < .01$ (partial $\eta^2 = .019$, power = 0.86), instructional strategies $F(1, 465) = 13.66, p < .001$ (partial $\eta^2 = .028$, power = 0.96), and classroom management $F(1, 465) = 13.66, p < .001$ (partial $\eta^2 = .028$, power = 0.96), all
showed significant differences. Since the variable discussed in this section only has two
groups, a Scheffé post hoc test is not warranted for further analysis. The results show
that those who were a mentor had greater scores on student engagement, instructional
strategies, and classroom management scores than those who were not a mentor (Table
4.26).

Table 4.25. ANOVA’s on Research Variables by I Am a Mentor (Yes vs. No)

<table>
<thead>
<tr>
<th>Dependent Variable</th>
<th>F</th>
<th>p</th>
<th>Partial η²</th>
<th>Power</th>
</tr>
</thead>
<tbody>
<tr>
<td>Student Engagement</td>
<td>9.16</td>
<td>.003</td>
<td>.019</td>
<td>.855</td>
</tr>
<tr>
<td>Instructional Strategies</td>
<td>13.66</td>
<td>.001*</td>
<td>.028</td>
<td>.958</td>
</tr>
<tr>
<td>Classroom Management</td>
<td>13.66</td>
<td>.001*</td>
<td>.028</td>
<td>.958</td>
</tr>
<tr>
<td>Trust in Principal</td>
<td>2.18</td>
<td>.141</td>
<td>.005</td>
<td>.313</td>
</tr>
<tr>
<td>Trust in Colleagues</td>
<td>0.27</td>
<td>.605</td>
<td>.001</td>
<td>.081</td>
</tr>
<tr>
<td>Trust in Clients</td>
<td>0.10</td>
<td>.756</td>
<td>.000</td>
<td>.061</td>
</tr>
<tr>
<td>Collective Efficacy</td>
<td>0.67</td>
<td>.415</td>
<td>.001</td>
<td>.129</td>
</tr>
</tbody>
</table>

*p ≤ .001.

Table 4.26. Scheffé Post Hoc Results by I Am a Mentor (Yes vs. No)

<table>
<thead>
<tr>
<th>Variable</th>
<th>I am a mentor</th>
<th>M</th>
<th>SD</th>
<th>P</th>
<th>N</th>
</tr>
</thead>
<tbody>
<tr>
<td>Student Engagement</td>
<td>Yes</td>
<td>33.60</td>
<td>4.38</td>
<td>p&lt;.05</td>
<td>218</td>
</tr>
<tr>
<td></td>
<td>No</td>
<td>32.37</td>
<td>4.42</td>
<td></td>
<td>255</td>
</tr>
<tr>
<td>Instructional Strategies</td>
<td>Yes</td>
<td>35.10</td>
<td>4.17</td>
<td>p&lt;.05</td>
<td>218</td>
</tr>
<tr>
<td></td>
<td>No</td>
<td>33.69</td>
<td>4.11</td>
<td></td>
<td>255</td>
</tr>
<tr>
<td>Classroom Management</td>
<td>Yes</td>
<td>35.89</td>
<td>3.87</td>
<td>p&lt;.05</td>
<td>218</td>
</tr>
<tr>
<td></td>
<td>No</td>
<td>34.51</td>
<td>4.17</td>
<td></td>
<td>255</td>
</tr>
</tbody>
</table>
Research Question 3

To answer research question 3, an analysis was done for each survey. The Teachers’ Sense of Efficacy Scale was tested for its reliability and validity to measure teacher efficacy. The other two surveys that had also been combined into the instrument for the study were scored and standardized scores for each campus were produced. With these new scores, the responses were compared to normal scores on the surveys.

*Teachers’ Sense of Efficacy Scale (TSES)*

In accordance with previous research done in this field (Tschannen-Moran & Woolfolk Hoy, 2001), the Teachers’ Sense of Efficacy Scale was adjusted to compare them to average scores for the surveys. The unweighted means were determined for the items that load on each factor, given a “unweighted mean score” (unWM). These mean scores could then be compared to the surveys’ “standardized mean scores” (StandM) to give a comparison between campuses and national averages.

In student engagement, overall campuses mean (umWM) were below the standard mean (StanM) calculated by developers of the instrument, suggesting the teachers from all schools had less confidence in their ability to engage students in learning. The same was true for instructional strategies. Teachers had less confidence in their instructional strategies at all schools compared to the standard mean (StanM). For classroom management, campus teachers had an overall mean that was higher than the standard mean calculated by developers of the instrument. This suggests the teachers studied feel they have firm control of their classroom management (see Table 4.27).
<table>
<thead>
<tr>
<th>School</th>
<th>Student Engagement</th>
<th>Instructional Strategy</th>
<th>Classroom Management</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Campus 1</td>
<td>33.29 6.7 7.3 35</td>
<td>34.57 6.9 7.3 35</td>
<td>35.14 7.0 6.7 35</td>
<td>35.06 7.1 6.7 589</td>
</tr>
<tr>
<td>Campus 2</td>
<td>33.83 6.8 7.3 23</td>
<td>35.26 7.1 7.3 23</td>
<td>35.70 7.1 6.7 23</td>
<td>35.18 7.1 6.7 230</td>
</tr>
<tr>
<td>Campus 3</td>
<td>34.89 7.0 7.3 36</td>
<td>34.83 6.9 7.3 36</td>
<td>35.78 7.1 6.7 36</td>
<td>35.31 7.1 6.7 360</td>
</tr>
<tr>
<td>Campus 4</td>
<td>35.33 7.0 7.3 30</td>
<td>36.03 7.2 7.3 30</td>
<td>36.43 7.3 6.7 30</td>
<td>35.76 7.1 6.7 300</td>
</tr>
<tr>
<td>Campus 5</td>
<td>33.48 6.7 7.3 42</td>
<td>34.02 6.8 7.3 42</td>
<td>34.33 6.9 6.7 42</td>
<td>35.04 6.8 6.7 420</td>
</tr>
<tr>
<td>Campus 6</td>
<td>32.66 6.5 7.3 35</td>
<td>34.57 6.9 7.3 35</td>
<td>34.57 6.9 6.7 35</td>
<td>35.04 6.8 6.7 350</td>
</tr>
<tr>
<td>Campus 7</td>
<td>35.23 7.0 7.3 35</td>
<td>36.03 7.2 7.3 35</td>
<td>37.09 7.4 6.7 35</td>
<td>35.04 6.8 6.7 350</td>
</tr>
<tr>
<td>Campus 8</td>
<td>33.95 6.8 7.3 37</td>
<td>34.30 6.9 7.3 37</td>
<td>35.54 7.1 6.7 37</td>
<td>35.04 6.8 6.7 370</td>
</tr>
<tr>
<td>Campus 9</td>
<td>32.56 6.5 7.3 32</td>
<td>34.69 6.9 7.3 32</td>
<td>35.47 7.1 6.7 32</td>
<td>35.04 6.8 6.7 320</td>
</tr>
<tr>
<td>Campus 10</td>
<td>31.06 6.2 7.3 47</td>
<td>33.96 6.8 7.3 47</td>
<td>34.94 7.0 6.7 47</td>
<td>35.04 6.8 6.7 470</td>
</tr>
<tr>
<td>Campus 11</td>
<td>31.84 6.4 7.3 38</td>
<td>32.79 6.6 7.3 38</td>
<td>34.47 6.9 6.7 38</td>
<td>35.04 6.8 6.7 380</td>
</tr>
<tr>
<td>Campus 12</td>
<td>32.10 6.4 7.3 52</td>
<td>Campus 13</td>
<td>34.48 6.9 6.7 52</td>
<td>35.04 6.8 6.7 520</td>
</tr>
<tr>
<td>Campus 13</td>
<td>32.26 6.5 7.3 147</td>
<td>Campus 13</td>
<td>34.50 6.9 6.7 147</td>
<td>35.04 6.8 6.7 1470</td>
</tr>
</tbody>
</table>

Table 4.27. Self-Efficacy Scores Across Campuses (Standardized and Unstandardized)
Omnibus T-Scale (OTS)

Next, standardized scores were computed for the Omnibus T-scales for purposes of comparison of outcomes for each campus (Hoy & Tschannen-Moran, 2003). Standardized Omnibus T-scores are computed with a mean of 500 and a standard deviation of 100. The following three formulas were used:

- Standard Score for Trust in Clients (TCl) = $100 \frac{(TCl-3.53)}{.621} + 500$
- Standard Score for Trust in the Principal (TP) = $100 \frac{(TP-4.42)}{.725} + 500$
- Standard Score for Trust in Colleagues (TCo) = $100 \frac{(TCo-4.46)}{.443} + 500$

School scores were standardized against the normative data provided in the Ohio sample, established by the original researchers. Thus, if a school score was 700 on faculty trust in colleagues, it was two standard deviations above the average score on faculty trust in colleagues of all schools in the sample; that is, the school has more faculty trust in colleagues than 97% of the schools in the sample. The system used is the same as the one used in reporting individual scores on the SAT, CEEB, and GRE. The range of these scores is presented in Table 3.2.

One school campus (Campus 2) scored lower than 97% of the schools in the standardized schools sample in principal trust (Table 4.28). Another campus scored lower than 84% of the schools in the standardized schools sample (Campus 9). Four school campuses scored higher in principal trust than 84% of the schools in the standardized schools sample (Campus 3, Campus 5, Campus 7, and Campus 10).
Table 4.28. Trust Scores Across Campuses and Standardized Rankings

<table>
<thead>
<tr>
<th>School</th>
<th>M</th>
<th>Ranking</th>
</tr>
</thead>
<tbody>
<tr>
<td>Standardized Principal</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Campus 1</td>
<td>534.74</td>
<td>Average</td>
</tr>
<tr>
<td>Campus 2</td>
<td>346.58</td>
<td>Lower than 97%</td>
</tr>
<tr>
<td>Campus 3</td>
<td>561.71</td>
<td>Higher than 84%</td>
</tr>
<tr>
<td>Campus 4</td>
<td>534.82</td>
<td>Average</td>
</tr>
<tr>
<td>Campus 5</td>
<td>608.26</td>
<td>Higher than 84%</td>
</tr>
<tr>
<td>Campus 6</td>
<td>488.23</td>
<td>Average</td>
</tr>
<tr>
<td>Campus 7</td>
<td>603.15</td>
<td>Higher than 84%</td>
</tr>
<tr>
<td>Campus 8</td>
<td>471.76</td>
<td>Average</td>
</tr>
<tr>
<td>Campus 9</td>
<td>397.89</td>
<td>Lower than 84%</td>
</tr>
<tr>
<td>Campus 10</td>
<td>558.06</td>
<td>Higher than 84%</td>
</tr>
<tr>
<td>Campus 11</td>
<td>451.39</td>
<td>Average</td>
</tr>
<tr>
<td>Campus 12</td>
<td>543.83</td>
<td>Average</td>
</tr>
<tr>
<td>Campus 13</td>
<td>537.19</td>
<td>Average</td>
</tr>
<tr>
<td>Standardized Client</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Campus 1</td>
<td>615.94</td>
<td>Higher than 84%</td>
</tr>
<tr>
<td>Campus 2</td>
<td>618.42</td>
<td>Higher than 84%</td>
</tr>
<tr>
<td>Campus 3</td>
<td>632.78</td>
<td>Higher than 84%</td>
</tr>
<tr>
<td>Campus 4</td>
<td>562.91</td>
<td>Higher than 84%</td>
</tr>
<tr>
<td>Campus 5</td>
<td>602.52</td>
<td>Higher than 84%</td>
</tr>
<tr>
<td>Campus 6</td>
<td>571.53</td>
<td>Higher than 84%</td>
</tr>
<tr>
<td>Campus 7</td>
<td>683.34</td>
<td>Higher than 97%</td>
</tr>
<tr>
<td>Campus 8</td>
<td>564.95</td>
<td>Higher than 84%</td>
</tr>
<tr>
<td>Campus 9</td>
<td>589.27</td>
<td>Higher than 84%</td>
</tr>
<tr>
<td>Campus 10</td>
<td>553.73</td>
<td>Higher than 84%</td>
</tr>
<tr>
<td>Campus 11</td>
<td>561.32</td>
<td>Higher than 84%</td>
</tr>
<tr>
<td>Campus 12</td>
<td>550.11</td>
<td>Higher than 84%</td>
</tr>
<tr>
<td>Campus 13</td>
<td>521.05</td>
<td>Average</td>
</tr>
<tr>
<td>Standardized Colleagues</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Campus 1</td>
<td>470.23</td>
<td>Average</td>
</tr>
<tr>
<td>Campus 2</td>
<td>598.02</td>
<td>Higher than 84%</td>
</tr>
<tr>
<td>Campus 3</td>
<td>548.36</td>
<td>Average</td>
</tr>
<tr>
<td>Campus 4</td>
<td>506.11</td>
<td>Average</td>
</tr>
<tr>
<td>Campus 5</td>
<td>531.76</td>
<td>Average</td>
</tr>
<tr>
<td>Campus 6</td>
<td>512.67</td>
<td>Average</td>
</tr>
<tr>
<td>Campus 7</td>
<td>687.20</td>
<td>Higher than 97%</td>
</tr>
<tr>
<td>Campus 8*</td>
<td>440.06</td>
<td>Lower than 84%</td>
</tr>
<tr>
<td>Campus 9</td>
<td>509.91</td>
<td>Average</td>
</tr>
<tr>
<td>Campus 10</td>
<td>546.87</td>
<td>Average</td>
</tr>
<tr>
<td>Campus 11*</td>
<td>423.62</td>
<td>Lower than 84%</td>
</tr>
<tr>
<td>Campus 12</td>
<td>498.52</td>
<td>Average</td>
</tr>
<tr>
<td>Campus 13</td>
<td>501.05</td>
<td>Average</td>
</tr>
<tr>
<td>Total</td>
<td>515.75</td>
<td>Average</td>
</tr>
</tbody>
</table>

Note. If the score is 200, it is lower than 99% of the schools, if the score is 300, it is lower than 97% of the schools, if the score is 400, it is lower than 84% of the schools, if the score is 500, it is average, if the score is 600, it is higher than 84% of the schools, if the score is 700, it is higher than 97% of the schools, if the score is 800, it is higher than 99% of the schools.

All school campuses with the exception of Campus 13 scored higher than 84% of the standardized school sample in client trust (trust in students’ ability to perform).
Campus 13 scored in the average range for client trust. Two school campuses scored lower than 84% of the schools in standardized sample in trust in colleagues (Campus 8 and Campus 11). Two school campuses scored higher than 84% of the schools in the standardized sample in trust in colleagues (Campus 2 and Campus 7).

*Collective Efficacy Scale (CE-Scale)*

Collective efficacy is the shared perceptions of teachers in a school that the efforts of the faculty as a whole will have positive effects on students. The Collective Efficacy Scale used for the study has a standardized score scale developed by the researchers who developed it (Goddard, Hoy, & Woolfolk Hoy, 2000; Goddard, Tschannen-Moran, & Hoy, 2001a). The scale is listed in Table 3.2.

Most schools in the survey sample were rated “average.” Three of the schools were lower than 84% of the schools calculated in the standardized average, in collective efficacy (Campus 4, Campus 12, and Campus 13). One school was higher than 84% of the schools calculated in the standardized average for collective efficacy (Campus 7). Frequencies and percents are listed in Table 4.29. Means and standard deviations are listed in Table 4.30.

<table>
<thead>
<tr>
<th>Campus</th>
<th>Frequency</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lower than 84% of the schools</td>
<td>3</td>
<td>23.1</td>
</tr>
<tr>
<td>Average</td>
<td>9</td>
<td>69.2</td>
</tr>
<tr>
<td>Higher than 84% of the schools</td>
<td>1</td>
<td>7.7</td>
</tr>
</tbody>
</table>
Table 4.30. Collective Efficacy and Standardized Classifications Across Campuses

<table>
<thead>
<tr>
<th>School</th>
<th>M</th>
<th>Classification</th>
<th>SD</th>
</tr>
</thead>
<tbody>
<tr>
<td>Campus 1</td>
<td>542.25</td>
<td>Average</td>
<td>88.58</td>
</tr>
<tr>
<td>Campus 2</td>
<td>588.79</td>
<td>Average</td>
<td>78.43</td>
</tr>
<tr>
<td>Campus 3</td>
<td>560.08</td>
<td>Average</td>
<td>83.70</td>
</tr>
<tr>
<td>Campus 4*</td>
<td>499.45</td>
<td>Lower</td>
<td>103.87</td>
</tr>
<tr>
<td>Campus 5</td>
<td>539.61</td>
<td>Average</td>
<td>90.27</td>
</tr>
<tr>
<td>Campus 6</td>
<td>531.14</td>
<td>Average</td>
<td>98.00</td>
</tr>
<tr>
<td>Campus 7</td>
<td>618.58</td>
<td>Higher</td>
<td>69.01</td>
</tr>
<tr>
<td>Campus 8</td>
<td>501.84</td>
<td>Average</td>
<td>88.70</td>
</tr>
<tr>
<td>Campus 9</td>
<td>533.83</td>
<td>Average</td>
<td>98.49</td>
</tr>
<tr>
<td>Campus 10</td>
<td>523.93</td>
<td>Average</td>
<td>71.28</td>
</tr>
<tr>
<td>Campus 11</td>
<td>523.47</td>
<td>Average</td>
<td>83.25</td>
</tr>
<tr>
<td>Campus 12*</td>
<td>491.49</td>
<td>Lower</td>
<td>129.21</td>
</tr>
<tr>
<td>Campus 13*</td>
<td>491.08</td>
<td>Lower</td>
<td>94.11</td>
</tr>
</tbody>
</table>

*Lower than 84% of the schools.

**Summary of Findings**

In comparing survey scores from each campus, results showed that the Teachers’ Sense of Self-Efficacy (TSES) subcategory of student engagement revealed significant differences between schools. Specifically, Campus 7 had significantly higher ratings of student engagement than Campus 10. The TSES subcategories of instructional strategies and classroom management revealed no significant differences between the schools. The OTS subcategory of trust in principal revealed significant differences between several schools. Campus 2 was significantly lower in trust in principal than Campus 5. Campus 11 had lower scores than Campus 10, Campus 12, Campus 14, and Campus 5. Campus 9 was lower than those schools listed above and Campus 5, Campus 4, and Campus 7. For the OTS subcategory of trust in colleagues, Campus 11 showed lower trust scores than Campus 7. For trust in clients, Campus 7 showed higher trust scores than Campus 10,
Campus 12, Campus 11, and Campus 13. For collective efficacy, which had no subcategories, the scores revealed that Campus 7 had higher collective efficacy than Campus 4, Campus 8, Campus 12, and Campus 13.

In comparing survey responses across teacher demographics, results showed gender differences in trust in principal, trust in clients, and collective efficacy. In all three areas, females reported significantly higher trust and efficacy than males. Differences in years of experience revealed significant differences in the respondents’ trust of colleagues. Teachers with 1-3 years of experience reported less trust of colleagues than those with less than 1 year of experience and those with 3-6 years of experience. Ethnic differences were found in respondents’ student engagement, with African American respondents reporting significantly higher student engagement than Anglos. For teacher certification, no differences were found between certified and uncertified teachers. When comparing respondents who did or did not have a mentor their first year, those without mentors reported lower student engagement but higher trust in principals compared to those with mentors.

In the category of mentor helpfulness, survey respondents who stated that they had a helpful mentor reported higher student engagement, classroom management, trust in principal, and collective efficacy than those who did not report a helpful mentor. With personal mentor experience, respondents who reported at least one year of mentoring, another teacher showed higher student engagement, instructional strategies, and classroom management than those who have not mentored another teacher.
In the final analysis, the three categories of Teacher’ Sense of Self-Efficacy Scale, Collective Efficacy Scale, and Omnibus T-Scale were all compared to the “standard” national averages. The pattern of results show that schools were generally below average in the TSES subcategories of student engagement and instructional strategies. At the same time, the schools were generally above average in the subcategory of classroom management. Regarding the OTS subcategories, the responses showed a normal distribution of scores for trust of principal and trust of colleagues. The respondents were generally above the national average in the subcategory of trust of clients. Regarding collective efficacy ratings, most of the schools were average, but there were more below-average schools and less above-average schools than the national average.

The findings from the study indicate that there were 13 areas that demonstrated significant differences. In the first question, the analysis indicated that there were five areas of significant differences: (a) student engagement, (b) trust in principal, (c) trust in colleagues, (d) trust in clients, and (e) collective efficacy. In the second question, the analysis indicated that there were six areas of significant differences: (a) gender, (b) years of experience, (c) ethnicity, (d) having a mentor, (e) helpfulness of mentor, and (f) being a mentor. In the final questions, the significant difference lies in the comparison of survey responses to national averages in the area of trust and teacher self-efficacy.

In conclusion, the responses demonstrated that there are some differences between campuses, but not dramatic differences between campuses. The teachers in this southwest Texas school district do not experience much difference across demographic
groups such as ethnicity and gender. They do, however, show differences when it comes to years of experience and mentorships. The responses suggest that a good way to improve the teaching experience is through the mentorship program. This was evident in the response that teachers who considered their mentor helpful showed higher levels of self-efficacy, collective efficacy, and trust. The helpfulness of the mentor was more significant in the positive responses than merely having a mentor.

The next chapter will address the findings and discuss how these relate to the research in the field of self-efficacy, collective efficacy, and trust.
CHAPTER V
SUMMARY, CONCLUSIONS, AND RECOMMENDATIONS

Introduction

This chapter provides a summary of the results of the study of teacher efficacy, the collective efficacy of school campuses, and the dimensions of trust among campuses. Also included in this chapter are the implications and recommendations for practice resulting from the study as well as recommendations for future research.

For this research, three established surveys were combined to create a single survey of 81 questions. The three surveys were Teachers’ Sense of Efficacy Scale (TSES) developed by Tschannen-Moran and Woolfolk Hoy (2001), the Collective Efficacy Scale (CE-Scale) developed by Goddard, Hoy, and Woolfolk Hoy (2004), and Omnibus T-Scale (OTS) developed by Hoy (2002). The pre-developed surveys were grouped into three areas: (a) teacher efficacy, (b) trust, and (c) collective efficacy. The teacher efficacy grouping included: (a) student engagement, (b) instructional strategies, and (c) classroom management. The trust grouping included: (a) trust in principal, (b) trust in colleagues, and (c) trust in clients. The last grouping consisted of collective efficacy. The questions in each of these seven areas were the dependent variables studied and their relationship to the demographic variables of: campuses in the district, gender, years of experience, ethnicity, teacher certification, mentor first year, mentor teacher helpful, and if the teacher at each campus was a mentor. The summary that follows will reveal the significant findings from the data analysis of the three surveys and the demographic variables used for the study.
The study was conducted in March of 2010. The study involved the administration of the combined survey to 648 (87%) of the teachers working in the same school district, composed of 13 school campuses (1 high school campus, 3 middle schools, and 9 elementary schools). The survey was administered in a southwest Texas school district (half urban and half rural) with an enrollment of 11,333 (as of Fall 2009). The student population consists of 85.4% Hispanic and 8.6% White, and 6.1% other. The district is composed of 82% economically disadvantaged, 14.9% limited English proficient, and 69.4% at-risk of not graduating. The special education population consists of 11.5% of the total district population (Texas Education Agency, 2009).

Summary

The first question analyzed for the study was: “What are the scores across campuses on the following surveys: Teachers’ Sense of Efficacy Scale (TSES), Collective Efficacy Scale (CE-Scale), and Omnibus T-Scale (OTS)? The scores (means and standard deviations) are presented in the following tables: Table 4.11, Table 4.12, Table 4.13, Table 4.14, and Table 4.15.

A multivariate analysis of variance was used to analyze differences between campuses on the survey responses, and the seven areas of dependent variables within the survey. Differences were revealed on student engagement, trust in principal, trust in colleagues, trust in clients, and collective efficacy between schools (see ANOVA Table 4.10).

The first finding is in the mean differences in student engagement scores between campuses. Further analysis through the use of Scheffé post hoc revealed that one
elementary school in particular had a higher mean difference in student engagement, and one of the middle schools had the lowest mean difference in student engagement. Despite this difference, the pattern shows the 13 campuses are generally similar in the teachers’ ratings of student engagement. These teachers can be considered generally similar in their self-efficacy regarding students’ engagement. Research conducted by Tschannen-Moran, Woolfolk Hoy, and Hoy’s (1998) emphasizes the task specific nature of teacher self-efficacy: “Teacher efficacy is the teacher’s belief in her and his ability to organize and execute the courses of action required to successfully accomplish a specific teaching task in a particular context” (p. 233). Student engagement is the key to student learning in the education setting. If teachers’ perceptions are they cannot perform the task of student engagement, then learning will be difficult to accomplish. According to Hoy, Hoy, and Davis (2009),

Greater efficacy leads to greater effort and persistence, which leads to better performance, which, in turn, leads to greater efficacy. The reverse is also true. Lower efficacy leads to less effort and giving up easily, which leads to poor teaching outcomes, which then produce decreased efficacy. (p. 629)

According to the research, teacher efficacy ultimately has a direct effect on effort. Research reveals teachers with a high sense of self-efficacy have fewer absences (Imants & Van Zoelen, 1995), handle difficult students with greater success and refer them less to special classes (Soodak & Podell, 1998), and are less likely to feel burnout and turn away from the teaching profession (Brouwers & Tomic, 2000; Johnson & Birkeland, 2003). Persistence is a trademark of confident teachers with a high sense of self-efficacy. Instead of feeling defeated by setbacks in student response or outcomes, persistent teachers try new techniques and strategies until they are successful (Bandura, 1997).
The previous research generally shows that a teacher’s self-efficacy can have influences on education ranging from student performance to absenteeism. The current study found that self-efficacy scores of teachers were generally similar across all of the campuses. This suggests that different campuses do not have different influences on teachers’ self efficacy.

Another area of difference was in the area of trust. This would encompass the trust in principal, trust in colleagues, and trust in clients. Several school campuses had lower mean differences in trust in principal compared to other campuses. Also, several schools showed lower mean differences in both trust of colleagues and trust of clients in comparison to the school of Campus 7. This pattern of results could suggest that the campuses can be used to compare low, average, and high trust in principal for its influence on teachers. Further, Campus 7 appears to offer a special example of a campus with more trusting relationships than the average for the district (see Tables 4.12, 4.13, and 4.14).

The research suggests that trust is a lifeline between students, teachers, principals, and successful outcomes in school settings. Friedman (2006) describes a “flat world,” where very complex problems are solved by people who find horizontal connections in a high-trust society and are used as an advantage that leads ultimately to success. This can have a profound effect on not only teacher morale, but also on student achievement. The principal is the pivotal leader of a school campus. Seidman (as cited in Friedman, 2006) writes, “The more people trust each other or their leaders, the more likely they are going to work well together” (p. 320). Thus, it would make sense in
schools relying on communication among staff, teamwork, creativity, planning, and sharing of ideas, that trust is a very necessary component to success. In schools, just as in society, if faculty can agree on rules and principles to create predictability, confidence, and trust, then they can look to their leaders for consistency, predictability, and follow through of agreements made and promises made, which create trust. Covey (1991) says, “Trust is the foundation of all effective relationships and organizations” (p. 31). Trust is the ingredient to creating a learning community; and without the cohesion, a learning community cannot function (Speck, as cited in Longley, 2006). Supporting this proposition, an analysis of North Carolina Teacher Working Conditions Survey data found establishing an atmosphere of trust and mutual respect was strongly correlated with student achievement at elementary, middle, and high schools. In addition, trust in the school environment was strongly correlated with teachers’ employment decisions as well (Hirsch & Emerick, 2006). Lack of trust is a serious impediment to school reform efforts across the United States (Tschannen-Moran & Hoy, 2000).

Among the campuses, Campus 7 was found to be significantly higher in trust ratings than a few other schools such as Campus 12, Campus 11, and Campus 10. The research suggests that Campus 7 could also be found to have better communication, teamwork, planning, and sharing of ideas among staff since it had the higher trust levels. Therefore, further research could determine if trust differences are a result of the better communication, teamwork, planning, and sharing of ideas among staff.

The final area in question 1 with significant results was in the area of collective efficacy between schools. The results showed that Campus 7 was significantly higher
than several other schools. The other schools represent a generally similar level of collective efficacy. These results suggest that Campus 7 might have a strong level of collective efficacy that the research indicates has a positive influence on student achievement. It is possible that Campus 7 could be a mere anomaly. The other schools could represent a healthy collective efficacy, and Campus 7 is a special example of collective efficacy at work in the real world.

In turn, research shows that teachers who perceive low collective efficacy in their schools have a negative effect on student achievement. Collective teacher efficacy is a combination of individuals and their interactive production of academic success or as Bandura (1997) states, “the group’s shared belief in its conjoint capabilities to organize and execute courses of action required to produce given levels of attainments” (p. 16). Peers can also influence teacher practice by suggesting specific strategies and by working together to implement them. Collaboration among teachers promotes teacher efficacy (Chester & Beaudin, 1996), especially when it leads to instructional coordination within a school (Raudenbush, Rowan, & Cheong, 1992). Ultimately, as Rosenholtz (1989) states,

> Teachers, like members of most organizations, shape their beliefs and actions largely in conformance with the structures, policies and traditions of the workday world around them and where teachers collectively perceive students as capable learners, and themselves as capable teachers seem more likely to persevere and foster students’ academic gains. (p. 2)

Thus, if teachers do not believe in their students’ (clients) ability to perform well on learning tasks, academic gains may be beyond their means.
The second research question analyzed for the study was: “What are the demographic differences of teachers’ sense of self-efficacy, collective efficacy, and trust beliefs?” Each of the demographic variables (gender, years of experience, ethnicity, teacher certification, mentor first year, mentor teacher helpful, have been or are a mentor teacher) were analyzed for significant differences with the dependent variables (student engagement, instructional strategies, classroom management, trust in principals, trust in colleagues, trust in clients, and collective efficacy).

First a MANOVA was conducted on the seven dependent variables by gender, and significant differences were found between males and females on trust in students, trust in principal, collective efficacy, and student engagement. No significant difference was found between male and female teachers in instructional strategies, classroom management, and trust in colleagues. Females had statistically higher scores than males in all four of these areas: trust in principal, trust in clients, collective efficacy, and student engagement, possibly indicating greater trust in their students’ ability to learn and in their principal and a more positive sense of collective efficacy.

The first significant finding for question 2 (by gender) that female teachers had greater trust in the principals than male teachers could have several implications. One of them could be if male teachers do not trust in the principal and that trust is broken, then added negative stressors will become part of the system (Noonan et al., 2008). Another implication is principals will need to make sure they build open and effective communication in order to assure they are building trust with their faculties. Lastly, according to research from Bryk and Schneider (2002), the lack of trust in the principal
can affect productivity. Furthermore, in regard to question 2 (by gender), female teachers showed greater trust in their students’ ability to learn than male teachers. The fact female teachers showed greater trust in their students and abilities to learn than their male counterparts can have implications for the school organization as a whole. In the area of organizational studies, trust is a much researched topic (Zand, 1972), but it is only in recent years it has been examined in a more systemic way by educational researchers (Bryk & Schneider, 2002; Goddard, Tschannen-Moran, & Hoy, 2001a; Hoy Tschannen-Moran, 1999; Smith, Hoy, & Sweetland, 2001).

The determinants of teacher trust are very important to know since trust is related to the successful functioning of a school (Brewster & Railsback, 2003). Teacher trust in students not only influences students’ performance (Goddard, Tschannen-Moran, & Hoy, 2001a), but also teachers’ performance as it affects their sense of efficacy (Hoy & Tschannen-Moran, 1999). Fisler and Firestong (2006) revealed the importance of social trust for teacher learning. Thus, understanding the impact of the school context on teacher and student outcomes may contribute to greater staff awareness of pervasive trends in teacher attitudes that require immediate and systematic interventions efforts (Roach & Kratochwill, 2004). Previous research has illustrated that school context, school composition, or teacher characteristics may result in a lack of trust in students. The argument is teacher education could contribute to overcome certain stereotypes among prospective teachers (Nieto, 2000; van Houtte, 2007). Teacher trust is viewed from the relational trust prospective (Bryk & Schneider, 2002) indicating the importance of normative role expectations in the school. According to previous research gathered,
gender, ethic, and socioeconomic composition of the school are related to teacher trust as well (Goddard, Tschannen-Moran, & Hoy, 2001a; Van Houtte, 2007). School culture is associated with normative expectations teachers hold (Thrupp, 1999), thus school culture is formed by teachers’ level of trust (Van Maele & Van Houtte, 2008). At the teacher trust level, attention is paid to the role the teacher’s perception of the pupil’s ability to learn the curriculum presented them (Van Houtte, 2007). In this study, it could be suggested that if male teachers have a lower level of trust in their students, then according to the previous research, it could be said that they influence the overall school culture and student performance.

Finally for question 2 (by gender), differences in collective efficacy were found between males and females. The demographic frequency table on gender (Table 4.2) reveals there are a greater number of female teachers (48%-100% among schools) in the district than males. Therefore, female teachers may feel more collective efficacy among their own gender group. Again, there is limited research in male versus female teacher collective efficacy. Some studies have found female student teachers trust in their facility to engage their future students more than their male counterparts do. Although there is no consistent agreement between previous studies about the superiority of any gender (Oguz & Topkaya, 2008), primary female in-service or pre-service teachers could feel themselves more successful academically with their students because of certain cultural beliefs advocating that teaching at primary school is a job fitted for female teachers as it is more or less like mothering a child, which sometimes causes parents to prefer female teachers. In terms of teacher beliefs, on the other hand, the gender variable
does not seem to be an all-encompassing factor, as both male and female participants have both constructivist and traditional beliefs. Yet, the fact is that male participants were found in a previous study to have more traditional approaches to teaching and female student teachers were found more constructivists (Duru, 2006). Duru’s study may suggest that there is an impetus to gravitate towards constructivism for females and for males towards traditional teaching. The current study supports the conclusions of this previous research in the area where female teachers have a higher level of collective efficacy. This possibly suggests that some campuses are more accommodating to females than males.

The next demographic variable analyzed was the difference in teachers’ years of experience and the seven dependent variables. The results of the MANOVA showed significant differences between trust in colleagues and years of experience. Teachers with 1-3 years of experience and those with 7-12 years of experience had greater trust in colleagues then those with 4-6 years of experience. It is difficult to ascertain exactly why teachers in the 4-6 years of experience have less trust in their colleagues.

Another demographic variable (question 2) with significant findings was between ethnicity and student engagement. Scheffé post hoc tests were conducted to examine where mean differences lie. African Americans had a larger mean difference compared to the other ethnicity groups on both student engagement and collective efficacy. This finding could suggest African American teachers feel they have a more difficult time engaging students in learning. This is associated with their level of collective efficacy when compared to teachers of other ethnicities (Anglo, Hispanic, and other). Positive
student outcomes are dependent on engagement (Tschannen-Moran & Woolfolk Hoy, 2001). For many students, the norms and cultural practice exhibited in school (e.g., sitting quietly in their seat, raising their hand to ask a question) and varying dialogue (e.g., “Students what is the objective of this experiment?”) many times are in stark contrast with home, cultural, and linguistic practices. To ensure the success of their students, teachers need to be able to bridge the cultural and language expectation of students’ home lives and their lives at school (Allen & Boykin, 1992). If a teacher has the tools of socially being able to bridge the instructional environment with a student’s home experience, they ensure the student is not alienated from the new information and can scaffold the new information to their personal experience (Heath, 1983; Ladson-Billings, 1994).

Goddard, Hoy, and Woolfolk Hoy (2004) indicate that disadvantaged students, such as the ones who attend school in the district being studied, are better off in school where the culture is one in which there is a strong collective sense of the group’s ability to perform well academically. The research also goes on to say, faculties in different schools vary greatly in this collective sense of possibility of future success, and the degree to which they possess this optimism is strongly linked to student achievement. If the African American teachers have a significantly different level of confidence in their ability to engage students in learning and do not feel a strong degree of collective efficacy, it will be difficult for them to help students be successful. It is also noted, there are fewer than 6% African American teachers in the district being studied (see Table 4.4).
For the next demographic variable (question 2), “teacher certification,” no significant differences were found with the seven survey variable groupings.

The succeeding demographic variable (question 20, “mentor first year,”) did have significant differences in the dependent variables. Teachers who were not assigned mentors their first year of teaching had lower student engagement scores than those who did have mentors. Those who had mentors the first year had lower trust in principals’ scores than those who did not have mentors. The majority of teachers surveyed indicated they did not have a mentor their first teach year (see Table 4.6).

The majority of the teachers taking the survey who had a mentor their first year or so, indicated they did not find the mentor helpful (between 58.6%-86.7%). This finding is not in isolation. According to Wood and Stanulis (2009), more empirical studies are needed on the effects of induction on novice teacher performance and student achievement and on subject-based and urban teacher induction. Effective teacher induction programs thrive in school systems that respect novice teachers; there is a need to continue to learn to teach while they teach (Alliance for Excellent Education (AEE), 2004; Bartell, 2005; Johnson & Kardos, 2004; Stanulis, Burrill, & Ames, 2007; Wood & Waarich-Fischman, 2006).

Athanases and Achinstein (2003) indicate quality mentor programs have strong mentor support systems and offer formative assessment systems in order for novice teachers to monitor their progress toward developing their teaching practice. Research supports the importance of the first three years of a teacher’s induction into the profession and how critical they are. A high caliber induction program enhances teacher
learning through an intricate, multi-year system of carefully planned and structured activities that support novice teachers’ development level of professional development in their first through third year of teaching (Ingersoll & Smith, 2004; Stanulis et al., 2007).

Thus, the majority of teachers participating in this study felt they did not have a helpful mentor. Thus, it can be inferred that they could have missed the opportunity of receiving a quality induction program in the most critical years of their teaching development. By indicating their mentor teacher was not helpful, teachers taking the survey indicated they did not experience a quality induction program.

Teachers who had mentors the first year had lower trust in principal’s scores than those who did not have mentors. These results could be the result of having a mentor teacher who did not have trust in the principal. The mentor could have influenced their novice teacher’s trust in their principal, if they did not trust the principal. Regardless, through their individual research and joint research, Hoy and Tschannen-Moran (1999) have presented multiple studies that demonstrate trusting relationships among teachers and principals contribute to a positive school climate, productive communication, increases in student learning, teachers’ collective sense of efficacy, and overall school effectiveness (Hoy & Sweetland, 1999; Tschannen-Moran, 2000; Hoy and Tschannen-Moran, 1999). Thus, this finding could have a profound effect on school climate, productive communication, increases in student learning, teachers’ collective sense of efficacy, and the overall effectiveness of the school.

Finally, the last demographic (question 2) “I am a mentor” (yes vs. no) resulted in three statistically significant differences in student engagement, instructional
strategies, and classroom management. These elements of teacher self-efficacy (student engagement, instructional strategies, and classroom management) have been proven to increase student performance. Teacher efficacy influences goal setting and effort expenditure. Teachers who anticipate that they will be successful, set higher goals for themselves and their students. Teacher efficacy consistently predicts willingness to try out new teaching ideas, particularly techniques that are difficult to implement and involve sharing control with students (Ross, 1992). High expectations of causes motivates classroom experimentation because teachers anticipate they will be able to achieve the benefits of innovation and overcome obstacles that might arise. Teachers with high expectations about their ability to teach produce high student achievement (Goddard, Hoy, & Woolfolk Hoy, 2004). Teacher efficacy contributes to achievement because high efficacy teachers try harder, use management strategies that stimulate student autonomy, attend more closely to low ability student needs, and modify students’ ability perceptions (Ross, 1998). Studies have documented the positive effects of mentoring on the mentors themselves (Ganser, 1997; Gordon & Maxey, 2000; Holloway, 2001), thus having positive affects in teacher self-efficacy for both.

Question 3 was, “Do teachers’ self-efficacy, collective efficacy, and trust beliefs remain constant for every campus?” To answer question 3, the survey instrument used for this study was analyzed by comparing the standardized scores for each of the combined survey instruments individually by school campus: Teacher Sense of Efficacy Scale (TSES), Omnibus T-Scale (OTS), and Collective Efficacy Scale (CE-Scale).
First, the TSES was analyzed. In student engagement, overall campuses’ mean (unWM) were below the standard mean (StanM) calculated by developers of the instrument, suggesting the teachers from all schools had less confidence in their ability to engage students in learning. The same was true for instructional strategies. Teachers had less confidence in their instructional strategies at all schools compared to the standard mean (StanM). Overall, campus teachers had an overall mean that was higher than the standard mean calculated by developers of the instrument in classroom management. This suggests teachers at the district being studied feel they have firm control of their classroom management. Although it is necessary to have good classroom management, it is disconcerting that teachers indicate they are less comfortable with instruction and engaging students in their classrooms.

Next, the Omnibus T-Scale was analyzed comparing it to the standardized scores developed by the original researchers (Hoy & Tschannen-Moran, 2003). One school campus scored lower than 97% of the schools in the standardized schools sample in principal trust (Campus 2). Another campus scored lower than 84% of the schools in the standardized schools sample (Campus 9). Four school campuses scored higher in principal trust than 84% of the schools in the standardized schools sample (Campus 3, Campus 5, Campus 7, and Campus 10). All school campuses with the exception of campus 13 scored higher than 84% of the standardized schools sample in client trust (trust in students’ ability to perform). Campus 13 scored in the average range for client trust. Two school campuses scored lower than 84% of the schools in standardized sample in trust in colleagues (campus 8 and campus 11). Two school campuses scored
higher than 84% of the schools in the standardized sample in trust in colleagues (Campus 2 and Campus 7). Although some schools scored higher or lower than the national means found by the developers of this survey, the implications for these scores cannot lead to any solid conclusions. These scores provoke questions, as to the level of trust in various areas. Further study would be warranted so as to determine exactly what the pertinent issues are and why participants have lower levels of trust.

Finally, the CE survey was analyzed. The Collective Efficacy Scale used for the study has a standardized score scale developed by the researchers (Goddard, Hoy, & Woolfolk Hoy, 2000; Goddard, Tschannen-Moran, & Hoy, 2001a). Most schools in the survey sample were rated average. Three of the schools were lower than 84% of the schools calculated in the standardized average in collective efficacy (Campus 4, Campus 12, and Campus 13). One school was higher than 84% of the schools calculated in the standardized average for collective efficacy (Campus 7). As indicated earlier, collective efficacy is the shared perception of teachers in a school where the efforts of the faculty as a whole will have positive effects on students. Thus, schools would want a higher than average CE score, ideally. This score could be a baseline for schools to try to improve over time. Thus, it would be beneficial to use these results to measure improvement in collective efficacy over time.

Conclusions

The overall findings of this study answer three questions. The first question, “What are the scores for each campus and are there any differences among campus scores?” showed a successful gathering of data for all 13 campuses. The differences
observed among schools were in the areas of student engagement, trust in principal, trust in colleague, trust in client, and collective efficacy. In general, Campus 7 had much higher scores than other campuses, but campuses were commonly similar to each other. This could suggest that Campus 7 represents a positive example for other schools in these areas. It also could suggest that there are no generally bad schools according to the respondents.

The second question, “What are the demographic differences of teachers’ sense of self-efficacy, collective efficacy, and trust beliefs?” showed results in many areas. Gender differences were found in trust in principal, trust in clients, collective efficacy, and student engagement, with females rating themselves higher than males in all areas. This could lead to the conclusion that female teachers have a generally better experience than their male counterpart teachers. A possible explanation could be that there is a greater number of female teachers.

Teachers’ years of experience showed significant differences in trust in colleagues, with young (1-3 years) and more experienced (7-12 years) teachers showing more trust in colleagues, than those with a few years of experience (4-6 years). This could lead to the conclusion that teachers lose trust in colleagues for the first few years, but as they continue teaching, their trust in colleagues start to increase. Possible explanations for this could be their increase in experience and familiarity with their surrounding.

Questions related to teacher mentorship showed many significant results. Teachers who had a mentor reported higher student engagement and trust in principal.
Those who stated their mentor was helpful furthered stated higher student engagement, classroom management, trust in principal, and collective efficacy. Teachers who reported being a mentor reported higher student engagement, instructional strategies, and classroom management. In general, these results could suggest that mentor programs have a positive impact on the teaching experience. Student engagement seems to be the most generally improved area in relation to the mentor program. The results of being a mentor strongly suggest that mentoring generally improves self-efficacy.

A number of studies have pointed to the influence of teachers’ self-efficacy beliefs on academic achievement and success in their overall educational outcomes (Moore & Esselman, 1992, 1994; Muijs & Reynolds, 2001; Ross, 1992, 1998). Teachers with high self-efficacy beliefs are more likely than teachers with a low sense of self-efficacy to possess sound pedagogy and create and implement innovative and effective curriculum and instruction in the classroom and to use classroom management approaches and sound teaching methods that encourage students’ independent study and reduce custodial control (Cousins & Walker, 1995a, 1995b; Guskey, 1988), to take responsibility for students with special learning needs (Allinder, 1994; Jordan, Krcali-Iftar, & Diamond, 1993), to manage classroom problems (Chacon, 2005; Korevaar, 1990), and to keep students on task (Podell & Soodak, 1993). In addition, teachers’ self-reported self-efficacy as indicated in previous research, is associated with enhanced student’s motivation (Ashton & Webb, 1986; Roeser, Arbreton, & Anderman, 1993), higher self-esteem (Borton, 1991), ability to self-regulate (Rose & Medway, 1981), ease in managing school transitions (Midgley, Feldlaufer, & Eccles, 1989), and more positive
attitudes toward school (Miskel, McDonald, & Bloom, 1983). Since teachers’ self-efficacy may also contribute to students’ sense of efficacy, fostering their involvement in class activities, and their efforts in facing difficulties (Ross, 1998; Ross, Hogaboam-Gray, & Hannay, 2001), the results of this study could point to concerns for the domino effect of low teacher self-efficacy traits and students absorbing negative teaching efforts.

The third question, “Do teachers’ self-efficacy, collective efficacy, and trust beliefs remain constant for every campus?” was answered by comparing campus scores to the standardized national scores provided for each of the survey scales. Student engagement and instructional strategies were below the standardized means, and classroom management was above the standardized mean. This suggests the district studied varies compared to the average school. It could be that the district in this study serves a high proportion of low socio-economic students and a high LEP population. But there is no certainty to this, just predictions. The previous research has shown teachers of high-performing and disciplined students are more likely to be successful in their activities and tasks than teachers of students who have learning or disciplinary problems. The goal would be repeated experiences of success with students in order to bring their experience to higher levels of comprehension and contribute to their robust sense of efficacy.

Ultimately, confidence in teachers’ self-efficacy promotes a dedication to the profession and collaborative relationships with colleagues and parents (Coladarci, 1992; Hoover-Dempsey, Bassler, & Brissie, 1992; Imants & Van Zoelen, 1995) contributing to the positive and motivating and stimulating learning environment. The teachers with
higher self-efficacy are more likely to appreciate other school personnel’s contributions to the functioning of the school, to view the principal, colleagues, staff, students, and parents as fulfilling their obligations, and perceive the whole school as a fine-tuned machine mastering its mission (Caprara, Barbaranelli, Borgogni, Petitta, & Rubinacci, 2003; Caprara, Barbaranelli, Borgogni, & Steca, 2003). The ultimate goal for the district in this study would be higher self-efficacy and collective efficacy for the reasons listed above. Thus, ongoing surveys each year to measure their trust would be beneficial to see progress over time. In addition, studies including academic achievement for each campus as it relates to teacher self-efficacy and collective efficacy would be key.

**Recommendations**

Further research is needed in the district being studied in order to understand the influence of teacher demographics used in this study (school/campus; gender; years of experience; ethnicity; teacher certification; mentor in first year of teaching; finding the mentor teacher helpful; and being a mentor teacher) on teacher efficacy, trust, and collective efficacy. Each school is a unique learning community and results of this study show the impact of demographics on teacher efficacy, trust, and collective efficacy and how results of the study vary for different campuses. For example, campus 7 was a school where the respondents generally rated their teaching experience higher than other schools. Also, schools like campus 11, campus 10, and campus 11 had generally lower scores, particularly with trust ratings. Thus, further exploration of the significant differences found in the study are warranted.
Various scholars involved in efficacy and trust research have realized the need for longitudinal studies using quasi-experimental and experimental designs and qualitative methods to document how change occurs within teacher efficacy and to better understand the interdependent relationship between teacher efficacy and collective efficacy (Fives, 2003; Henson, 2001a; Tschannen-Moran, Woolfolk Hoy, & Hoy, 1998; Wheatley, 2005; Woolfolk & Hoy, 1990). With repetitions of this survey, such a longitudinal study can be done to determine the effectiveness of staff development and enhancements to improve teacher self-efficacy, collective efficacy, and trust.

Research should be done by university researchers partnered with teacher researchers to have an outside entity participate in teacher self-efficacy evaluation, mentoring programs, and campus needs assessments. University and school partnerships benefit both entities. Universities can provide the researchers information schools do not possess and campuses can provide universities with the teachers needed to establish a research base. The resulting partnership would allow teacher educators to indicate the teachers’ efficacy needs during pre-service and in-service years at the district and campuses participating in the studies (Ebmeier, 2003; Hoy & Spero, 2005; Soodak & Podell, 1996; Tschannen-Moran & Woolfolk Hoy, 2001; Wheatley, 2005).

It is hoped the school district participating in this study will continue the longitudinal studies with a partnering university and follow the improvement in teacher self-efficacy, trust, and collective efficacy over time. In turn, it is hoped student academic gains will parallel improvement in teacher efficacy and trust.
This study is a step towards defining the relationship between demographic variables, teacher efficacy, collective efficacy, and trust in a diverse southwest Texas district. It is hoped the results of this study cannot only be used at the district participating in the study but by other school districts in the state and nation to improve teaching and learning for teacher leaders, teachers, and students and, of course, to guide administrators trying to improve their campus academic outcomes.
REFERENCES


APPENDIX A

INFORMATION SHEET
Information Sheet that will be provided to participants

Teacher's Self-Efficacy and Their Relationship to Teacher Trust, Collective Efficacy, and Teacher Demographics

Introduction:
The purpose of this form is to provide you (a prospective research study participant) information that may affect your decision as to whether or not to participate in this research study.

If you agree, to participate in a research study that will review teacher's self-efficacy and their relationship to teacher trust, collective efficacy and teacher demographics to gather research that will assist in understand the relationships of teachers. The purpose of this study is to draw some general correlations to teacher's self-efficacy, trust and collective efficacy. The survey will be administered to all teachers at Southwest ISD. The data collected will be confidential and reported as such. The survey is divided by sections, 1) teacher self-efficacy, 2) teacher trust, 3) collective efficacy and 4) teacher demographics. You were selected to be a possible participant because you are a teacher at Southwest Independent School District.

What you will be asked to do?
If you agree to participate in this study, you will be asked to complete a questionnaire. This study will take approximately 30 minutes of your time.

What are the risks involved in this study?
The risks associated in this study are minimal, and are not greater than risks ordinarily encountered in daily life.

What are the possible benefits of this study?
You will receive no direct benefit from participating in this study however, the insight you provide through your survey responses may attribute to a better understanding of issues that teachers deal with. Program development and intervention can assist future teachers, thus creating a better and more successful teacher.

Do you have to participate?
No. Your participation is voluntary. You may decide not to participate or to withdraw any time without your current or future relations with Texas A &M University or Southwest ISD being affected.

Will there be any compensation?
There will not be any compensation for participating in the study.

Who will know about my participating in this research study?
This study is anonymous and will not require the participant to identify a name or identification number. The record of this study will be kept private. No identifiers linking
you to this study will be included in any sort of report that might be published. Research records will be stored securely and only Jeanette Ball, Executive Director will have access to the records.

**Whom do I contact with questions about the research?**
If you have questions regarding this study, you may contact, Jeanette Ball at 210-6224330 or jball@swisd.net

**Who do I contact about my rights as a research participant?**
This research study has been reviewed by the Human Subjects Protection Program and or the Institutional Review Board at Texas A &M University. For research-related problems or questions regarding your rights as a research participant, you can contact the office at (979)458-4067 or jrb@tamu.edu.

Person obtaining Permission: Jeanette Ball
Executive Director
210-622-4330
jball@swisd.net
11914 Dragon Lane
San Antonio, TX. 78252
APPENDIX B

TEACHERS’ SENSE OF EFFICACY SHEET (LONG FORM)
### Teachers’ Sense of Efficacy Scale (long form)

#### Teacher Beliefs

Directions: This questionnaire is designed to help us gain a better understanding of the kinds of things that create difficulties for teachers in their school activities. Please indicate your opinion about each of the statements below. Your answers are confidential.

<table>
<thead>
<tr>
<th>1. How much can you do to get through to the most difficult students?</th>
<th>(1) Nothing</th>
<th>(2) Very Little</th>
<th>(3) Some Influence</th>
<th>(4) Moderate Effect</th>
<th>(5) Considerable Effect</th>
<th>(6) Total Effect</th>
<th>(7) A Great Deal</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>2. How much can you do to help your students think critically?</td>
<td>(1) Nothing</td>
<td>(2) Very Little</td>
<td>(3) Some Influence</td>
<td>(4) Moderate Effect</td>
<td>(5) Considerable Effect</td>
<td>(6) Total Effect</td>
<td>(7) A Great Deal</td>
<td>Total</td>
</tr>
<tr>
<td>3. How much can you do to control disruptive behavior in the classroom?</td>
<td>(1) Nothing</td>
<td>(2) Very Little</td>
<td>(3) Some Influence</td>
<td>(4) Moderate Effect</td>
<td>(5) Considerable Effect</td>
<td>(6) Total Effect</td>
<td>(7) A Great Deal</td>
<td>Total</td>
</tr>
<tr>
<td>4. How much can you do to motivate students who show low interest in school work?</td>
<td>(1) Nothing</td>
<td>(2) Very Little</td>
<td>(3) Some Influence</td>
<td>(4) Moderate Effect</td>
<td>(5) Considerable Effect</td>
<td>(6) Total Effect</td>
<td>(7) A Great Deal</td>
<td>Total</td>
</tr>
<tr>
<td>5. To what extent can you make your expectations clear about student behavior?</td>
<td>(1) Nothing</td>
<td>(2) Very Little</td>
<td>(3) Some Influence</td>
<td>(4) Moderate Effect</td>
<td>(5) Considerable Effect</td>
<td>(6) Total Effect</td>
<td>(7) A Great Deal</td>
<td>Total</td>
</tr>
<tr>
<td>6. How much can you do to get students to believe they can do well in school work?</td>
<td>(1) Nothing</td>
<td>(2) Very Little</td>
<td>(3) Some Influence</td>
<td>(4) Moderate Effect</td>
<td>(5) Considerable Effect</td>
<td>(6) Total Effect</td>
<td>(7) A Great Deal</td>
<td>Total</td>
</tr>
<tr>
<td>7. How well can you respond to difficult questions from your students?</td>
<td>(1) Nothing</td>
<td>(2) Very Little</td>
<td>(3) Some Influence</td>
<td>(4) Moderate Effect</td>
<td>(5) Considerable Effect</td>
<td>(6) Total Effect</td>
<td>(7) A Great Deal</td>
<td>Total</td>
</tr>
<tr>
<td>8. How well can you establish routines to keep activities running smoothly?</td>
<td>(1) Nothing</td>
<td>(2) Very Little</td>
<td>(3) Some Influence</td>
<td>(4) Moderate Effect</td>
<td>(5) Considerable Effect</td>
<td>(6) Total Effect</td>
<td>(7) A Great Deal</td>
<td>Total</td>
</tr>
<tr>
<td>11. To what extent can you craft good questions for your students?</td>
<td>(1) Nothing</td>
<td>(2) Very Little</td>
<td>(3) Some Influence</td>
<td>(4) Moderate Effect</td>
<td>(5) Considerable Effect</td>
<td>(6) Total Effect</td>
<td>(7) A Great Deal</td>
<td>Total</td>
</tr>
<tr>
<td>14. How much can you do to improve the understanding of a student who is failing?</td>
<td>(1) Nothing</td>
<td>(2) Very Little</td>
<td>(3) Some Influence</td>
<td>(4) Moderate Effect</td>
<td>(5) Considerable Effect</td>
<td>(6) Total Effect</td>
<td>(7) A Great Deal</td>
<td>Total</td>
</tr>
<tr>
<td>15. How much can you do to calm a student who is disruptive or noisy?</td>
<td>(1) Nothing</td>
<td>(2) Very Little</td>
<td>(3) Some Influence</td>
<td>(4) Moderate Effect</td>
<td>(5) Considerable Effect</td>
<td>(6) Total Effect</td>
<td>(7) A Great Deal</td>
<td>Total</td>
</tr>
<tr>
<td>16. How well can you establish a classroom management system with each group of students?</td>
<td>(1) Nothing</td>
<td>(2) Very Little</td>
<td>(3) Some Influence</td>
<td>(4) Moderate Effect</td>
<td>(5) Considerable Effect</td>
<td>(6) Total Effect</td>
<td>(7) A Great Deal</td>
<td>Total</td>
</tr>
<tr>
<td>17. How much can you do to adjust your lessons to the proper level for individual students?</td>
<td>(1) Nothing</td>
<td>(2) Very Little</td>
<td>(3) Some Influence</td>
<td>(4) Moderate Effect</td>
<td>(5) Considerable Effect</td>
<td>(6) Total Effect</td>
<td>(7) A Great Deal</td>
<td>Total</td>
</tr>
<tr>
<td>19. How well can you keep a few problem students from ruining an entire lesson?</td>
<td>(1) Nothing</td>
<td>(2) Very Little</td>
<td>(3) Some Influence</td>
<td>(4) Moderate Effect</td>
<td>(5) Considerable Effect</td>
<td>(6) Total Effect</td>
<td>(7) A Great Deal</td>
<td>Total</td>
</tr>
<tr>
<td>20. To what extent can you provide an alternative explanation or example when students are confused?</td>
<td>(1) Nothing</td>
<td>(2) Very Little</td>
<td>(3) Some Influence</td>
<td>(4) Moderate Effect</td>
<td>(5) Considerable Effect</td>
<td>(6) Total Effect</td>
<td>(7) A Great Deal</td>
<td>Total</td>
</tr>
<tr>
<td>21. How well can you respond to defiant students?</td>
<td>(1) Nothing</td>
<td>(2) Very Little</td>
<td>(3) Some Influence</td>
<td>(4) Moderate Effect</td>
<td>(5) Considerable Effect</td>
<td>(6) Total Effect</td>
<td>(7) A Great Deal</td>
<td>Total</td>
</tr>
<tr>
<td>22. How much can you assist families in helping their children do well in school?</td>
<td>(1) Nothing</td>
<td>(2) Very Little</td>
<td>(3) Some Influence</td>
<td>(4) Moderate Effect</td>
<td>(5) Considerable Effect</td>
<td>(6) Total Effect</td>
<td>(7) A Great Deal</td>
<td>Total</td>
</tr>
<tr>
<td>24. How well can you provide appropriate challenges for very capable students?</td>
<td>(1) Nothing</td>
<td>(2) Very Little</td>
<td>(3) Some Influence</td>
<td>(4) Moderate Effect</td>
<td>(5) Considerable Effect</td>
<td>(6) Total Effect</td>
<td>(7) A Great Deal</td>
<td>Total</td>
</tr>
</tbody>
</table>
APPENDIX C

CE-SCALE
### CE-Scale

**Form L**

**DIRECTIONS:** Indicate your level of agreement with each of the following statements from STRONGLY DISAGREE (1) to STRONGLY AGREE (6).

<table>
<thead>
<tr>
<th>Statement</th>
<th>Strongly Disagree</th>
<th>Strongly Agree</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Teachers in the school are able to get through to the most difficult students</td>
<td>1 2 3 4 5 6</td>
<td></td>
</tr>
<tr>
<td>2. Teachers here are confident they will be able to motivate their students</td>
<td>1 2 3 4 5 6</td>
<td></td>
</tr>
<tr>
<td>3. If a child doesn’t want to learn teachers here give up</td>
<td>1 2 3 4 5 6</td>
<td></td>
</tr>
<tr>
<td>4. Teachers here don’t have the skills needed to produce meaningful student learning</td>
<td>1 2 3 4 5 6</td>
<td></td>
</tr>
<tr>
<td>5. If a child doesn’t learn something the first time teachers will try another way</td>
<td>1 2 3 4 5 6</td>
<td></td>
</tr>
<tr>
<td>6. Teachers in this school are skilled in various methods of teaching</td>
<td>1 2 3 4 5 6</td>
<td></td>
</tr>
<tr>
<td>7. Teachers here are well-prepared to teach the subjects they are assigned to teach</td>
<td>1 2 3 4 5 6</td>
<td></td>
</tr>
<tr>
<td>8. Teachers here fail to reach some students because of poor teaching methods</td>
<td>1 2 3 4 5 6</td>
<td></td>
</tr>
<tr>
<td>9. Teachers in this school have what it takes to get the children to learn</td>
<td>1 2 3 4 5 6</td>
<td></td>
</tr>
<tr>
<td>10. The lack of instructional materials and supplies makes teaching very difficult</td>
<td>1 2 3 4 5 6</td>
<td></td>
</tr>
<tr>
<td>11. Teachers in this school do not have the skills to deal with student disciplinary problems</td>
<td>1 2 3 4 5 6</td>
<td></td>
</tr>
<tr>
<td>12. Teachers in this school think there are some students that no one can reach</td>
<td>1 2 3 4 5 6</td>
<td></td>
</tr>
<tr>
<td>13. The quality of school facilities here really facilitates the teaching and learning process</td>
<td>1 2 3 4 5 6</td>
<td></td>
</tr>
<tr>
<td>14. The students here come in with so many advantages they are bound to learn</td>
<td>1 2 3 4 5 6</td>
<td></td>
</tr>
<tr>
<td>15. These students come to school ready to learn</td>
<td>1 2 3 4 5 6</td>
<td></td>
</tr>
<tr>
<td>16. Drugs and alcohol abuse in the community make learning difficult for students here</td>
<td>1 2 3 4 5 6</td>
<td></td>
</tr>
<tr>
<td>17. The opportunities in this community help ensure that these students will learn</td>
<td>1 2 3 4 5 6</td>
<td></td>
</tr>
<tr>
<td>18. Students here just aren’t motivated to learn</td>
<td>1 2 3 4 5 6</td>
<td></td>
</tr>
<tr>
<td>19. Learning is more difficult at this school because students are worried about their safety</td>
<td>1 2 3 4 5 6</td>
<td></td>
</tr>
<tr>
<td>20. Teachers here need more training to know how to deal with these students</td>
<td>1 2 3 4 5 6</td>
<td></td>
</tr>
<tr>
<td>21. Teachers in this school truly believe every child can learn</td>
<td>1 2 3 4 5 6</td>
<td></td>
</tr>
</tbody>
</table>
APPENDIX D

OMNIBUS T-SCALE
Omnibus T-Scale

**DIRECTIONS:**

The following are statements about your school. Please indicate the extent to which you agree with each statement along a scale from strongly disagree (1) to strongly agree (6).

<table>
<thead>
<tr>
<th></th>
<th>Strongly Disagree</th>
<th>Strongly Agree</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Teachers in this school trust the principal</td>
<td>1 2 3 4 5 6</td>
</tr>
<tr>
<td>2.</td>
<td>Teachers in this school trust each other</td>
<td>1 2 3 4 5 6</td>
</tr>
<tr>
<td>3.</td>
<td>Teachers in this school trust their students</td>
<td>1 2 3 4 5 6</td>
</tr>
<tr>
<td>4.</td>
<td>The teachers in this school are suspicious of most of the principal’s actions</td>
<td>1 2 3 4 5 6</td>
</tr>
<tr>
<td>5.</td>
<td>Teachers in this school typically look out for each other</td>
<td>1 2 3 4 5 6</td>
</tr>
<tr>
<td>6.</td>
<td>Teachers in this school trust the parents</td>
<td>1 2 3 4 5 6</td>
</tr>
<tr>
<td>7.</td>
<td>The teachers in this school have faith in the integrity of the principal</td>
<td>1 2 3 4 5 6</td>
</tr>
<tr>
<td>8.</td>
<td>Teachers in this school are suspicious of each other</td>
<td>1 2 3 4 5 6</td>
</tr>
<tr>
<td>9.</td>
<td>The principal in this school typically acts in the best interests of teachers</td>
<td>1 2 3 4 5 6</td>
</tr>
<tr>
<td>10.</td>
<td>Students in this school care about each other</td>
<td>1 2 3 4 5 6</td>
</tr>
<tr>
<td>11.</td>
<td>The principal of this school does not show concern for the teachers</td>
<td>1 2 3 4 5 6</td>
</tr>
<tr>
<td>12.</td>
<td>Even in difficult situations, teachers in this school can depend on each other</td>
<td>1 2 3 4 5 6</td>
</tr>
<tr>
<td>13.</td>
<td>Teachers in this school do their jobs well</td>
<td>1 2 3 4 5 6</td>
</tr>
<tr>
<td>14.</td>
<td>Parents in this school are reliable in their commitments</td>
<td>1 2 3 4 5 6</td>
</tr>
<tr>
<td>15.</td>
<td>Teachers in this school can rely on the principal</td>
<td>1 2 3 4 5 6</td>
</tr>
<tr>
<td>16.</td>
<td>Teachers in this school have faith in the integrity of their colleagues</td>
<td>1 2 3 4 5 6</td>
</tr>
<tr>
<td>17.</td>
<td>Students in this school can be counted on to do their work</td>
<td>1 2 3 4 5 6</td>
</tr>
<tr>
<td>18.</td>
<td>The principal in this school is competent in doing his or her job</td>
<td>1 2 3 4 5 6</td>
</tr>
<tr>
<td>19.</td>
<td>The teachers in this school are open with each other</td>
<td>1 2 3 4 5 6</td>
</tr>
<tr>
<td>20.</td>
<td>Teachers can count on parental support</td>
<td>1 2 3 4 5 6</td>
</tr>
<tr>
<td>21.</td>
<td>When teachers in this school tell you something, you can believe it</td>
<td>1 2 3 4 5 6</td>
</tr>
<tr>
<td>22.</td>
<td>Teachers here believe students are competent learners</td>
<td>1 2 3 4 5 6</td>
</tr>
<tr>
<td>23.</td>
<td>The principal doesn’t tell teachers what is really going on</td>
<td>1 2 3 4 5 6</td>
</tr>
<tr>
<td>24.</td>
<td>Teachers think that most of the parents do a good job</td>
<td>1 2 3 4 5 6</td>
</tr>
<tr>
<td>25.</td>
<td>Teachers can believe what parents tell them</td>
<td>1 2 3 4 5 6</td>
</tr>
<tr>
<td>26.</td>
<td>Students here are secretive</td>
<td>1 2 3 4 5 6</td>
</tr>
</tbody>
</table>

"Hoy and Tschannen-Moran (2003)"
APPENDIX E

DEMOGRAPHICS
1. Demographics

Dear Teachers:
Southwest Independent School District strives to find better ways to help teachers. In order to do so we would like for you to participate in this anonymous survey. Please take some time to complete this so that we may have data in order to help us learn how to better serve you. Southwest ISD Teachers are a most valuable resource and your feedback is important to us. Thank you in advance for your time and effort!!! It is greatly appreciated!

School
- Big Country
- Kriewald
- Indian Creek
- Hidden Cove
- Sky Harbor
- Bob Hope
- Elm Creek
- Sun Valley
- Southwest Elem.
- McNeir
- Scobee
- McAlinna
- Southwest High School

Gender
- Male
- Female

Years of Experience
- 1-3 years
- 4-6 years
- 7-12 years
- 12 or more years
<table>
<thead>
<tr>
<th>Ethnicity</th>
</tr>
</thead>
<tbody>
<tr>
<td>African American</td>
</tr>
<tr>
<td>Anglo</td>
</tr>
<tr>
<td>Hispanic</td>
</tr>
<tr>
<td>other</td>
</tr>
</tbody>
</table>

**Teacher Certification**
- I went through the traditional teacher certification program
- I went through alternative teacher certification program

**I had a mentor my first year of teaching.**
- Yes
- No

**I found my mentor teacher very helpful.**
- Yes
- No

**I am or have been a mentor teacher.**
- Yes
- No
VITA

Jeanette Ball
11914 Dragon Lane
San Antonio, Texas 78252

EDUCATION
Doctor of Philosophy, 2010
Major: Educational Administration
Texas A&M University
College Station, Texas

Master of Arts, 1999
Major: Education
The University of Texas San Antonio
San Antonio, Texas

Bachelor of Arts, 1994
Major: General Studies
Schreiner College
Kerrville, Texas

CERTIFICATION
Superintendent (Standard)
Mid-Management Administrator (2012)
Provisional Teaching (Life)

EXPERIENCE

1995-Present
SOUTHWEST INDEPENDENT SCHOOL DISTRICT
San Antonio, Texas

Assistant Superintendent for Administration and Human Resources, 2010-Present

Executive Director of Employee and Student Services, 2007-2010

Director of Staff Development, 2005-2007

Principal, Big Country Elementary School, 2000-2005

Assistant Principal, Big Country Elementary School, 1998-2000

Teacher, McNair Middle School, 1995-1998

This dissertation was typed and edited by Marilyn M. Oliva at Action Ink, Inc.