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**ELIMINATING THE ACHIEVEMENT GAP: THE STUDY OF ONE
TEXAS SCHOOL DISTRICT**

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**ELIMINATING THE ACHIEVEMENT GAP: THE STUDY OF ONE
TEXAS SCHOOL DISTRICT**

by

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Dissertation

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Dedication

To my husband, Roland, and my children,
Lauren and Leyton.

Acknowledgements

Phillippians 4:13. I can do everything through Christ who strengthens me.

My utmost gratitude and praise is offered to my Lord and Savior, Jesus Christ. The blessings and encouragement provided through the Holy Spirit allowed this dissertation to be completed and gave my family and myself the strength to endure such a challenge.

My husband, Roland, is an inspiration and esteemed colleague who pushes me to perform at my best. Our partnership has withstood the attainment of two doctoral degrees, a conquest that was truly beyond either of our dreams in the beginning. It is my hope that we will continue to grow together in our profession and in our marriage.

My daughter Lauren is the joy of my life. Her kindness and tender heart uplifted me when I felt overwhelmed and discouraged. Her beautiful acts of love fortified my soul. I want her to be confident and strong, knowing that she can achieve any dream or aspiration through hard work and effort while holding herself to the highest standards.

My son Leyton is made in my image. His determination and curiosity delight me everyday. His energy and persistent demand for attention and answers to quell his inquisitiveness provide balance and clarity for what is truly important

in life. I hope to channel his spirit and verve so that he will have the same desire to effectively improve our society.

I was honored to have the privilege of Dr. Jim Scheurich acting as my chair. World renowned for his contribution to research epistemologies and methodologies, Dr. Scheurich has led the way in promoting educational equity regarding race, class, and gender. As an expert in school and district transformation, Dr. Scheurich played a crucial role in guiding my study. His support and high standards of excellence were fundamental in being able to complete this inquiry.

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Despite decades of educational and social reform efforts targeted to eradicate differences in achievement among student groups, gaps in the achievement of minority and poor students remain one of the most pressing problems in education. During the past 4 decades, there has been a gradual evolution toward disaggregating ethnic student group data to the greatest extent possible. The rationale for devising a system of identifying students by race and socioeconomic level is to monitor performance differences between students and

to hold districts accountable for any gaps in achievement between student groups. Designed to confront and to solve equity and excellence issues, Texas instituted a statewide test, the TAAS, and implemented an accountability system that reports student achievement for ethnic and socioeconomic student groups as well as for all students. These results-oriented control structures, however, do not examine the design of the school system itself to determine if it is capable of achieving its aim. Some educational researchers have asserted that it is the design of the educational system itself that maintains the ethnic and economic achievement gaps (Apple, 1982).

Few school districts have succeeded in actually eliminating the gap; yet, one Texas school district has successfully addressed the problem by completely eradicating achievement differences between student groups. Four major theories are suggested as reasonable explanations for the district's success: (a) organizational learning disciplines; (b) correlates of effective schools; (c) total quality management in education; and (d) focused equity practices.

In attempting to discover how this phenomenon occurred, especially in light of the fact that an infinitesimal number of other school districts have had comparable accomplishments, five suppositions emerged: (a) The Texas Accountability System acted as the key infrastructure of the district transformation; (b) district leaders possessed a strong desire to remedy academic discrimination; (c) all stakeholders maintained a sustained focus on student

learning; (d) the conditions in the district were conducive to reciprocal support; and (e) student, teacher, and district efficacy improved the learning environment.

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Chapter 1: Overview

Introduction

The U.S. Department of Education has estimated that 3.4 million American children will enter public kindergarten in the fall of 2002. Tragically, at the very onset of their educational venture, research trends have predicted that in many ways the academic success or failure of these children has been determined well in advance of their parents entrusting them into the care of the public school system. Cohen, Raudenbush, and Loewenberg-Ball (2000) noted this trend by documenting troubling achievement differences between schools that enroll the children of affluent parents and schools that enroll the children of poor parents. The most powerful predictors of student performance, according to Cohen et al., were parents' educational and social backgrounds. Similarly, the Children's Defense Fund (1999) reported that, on the average, the educational outcomes for Black and Hispanic children are significantly below those for White children and that children from poor families generally have lower-than-average academic achievement and higher-than-average school dropout rates. Thus, whether children are White, Black, Hispanic, or economically disadvantaged will significantly predict their success in school, whether they go to college, and how much money they will earn as adults (Greenwald, Hedges, and Laine, 1996). Consequently, despite decades of educational and social reform efforts targeted to eradicate

differences in achievement among student groups, gaps in the achievement of minority and poor students remain one of the most pressing problems in education.

In addressing this problem, which has been commonly referred to as the “achievement gap,” it is essential to examine the racial and ethnic achievement gap trends that have been documented over the last 3 decades. One notable trend is that although research documented over the past 30 years has examined the White and Black bifurcated patterns, little research has been conducted on bifurcated patterns in the achievement gap between Whites and Hispanics (Lee, 2002). A second trend shows a significant longitudinal difference between Black and White scores on the National Assessment of Educational Progress (NAEP) from the 1970s through the 1990s (Jencks & Phillips, 1998). While the achievement gap narrowed in the 1970s and the 1980s, the gap in scores stabilized or widened in the 1990s (Haycock, 2001). In fact, since 1992, the gap in performance between Blacks and Whites has progressively increased each year (Zernike, 2001).

This data regarding the longitudinal gap and the recent increased gap in performance among student groups has prompted educational researchers to seek to identify factors that can explain why the achievement gap has continued to exist for over 30 years. From the literature review and data analysis, Lee (2002, p. 3) extracted three factors that fellow researchers assume to have contributed to some of the achievement gap trends. Those factors include socioeconomic and family conditions, youth culture and student behaviors, and schooling conditions and

practices (Cook & Evans, 2000; Grissmer, Flanagan, & Williamson, 1998; Jencks & Phillips, 1998; Wenglinsky, 1998). However, contrary to these widely held assumptions, Lee has contended that data based on the NAEP, the High School and Beyond, the National Education Longitudinal Study, as well as the Digest of Education Statistics all suggest that the conventional factors most commonly used to explain achievement gaps among racial and ethnic groups such as poverty, educational attainment of parents, motivation and effort, alcohol and illicit drug usage, instructional resources, and teachers, do not, in fact, account for the *variation* in achievement among these student groups. Possible causes for and influences on the racial and ethnic variation in achievement may be related to broader policy issues such as racial and ethnic biases, immigration, desegregation, funding equalization, standards-based education reform, and high-stakes testing (Lee). The complexity of the achievement gap is not only evident in the causation of the gap, but also in how to eliminate the gap.

While few school districts have succeeded in actually eliminating the gap, various school districts throughout the nation have made successful attempts at addressing the problem. The performance differences that have traditionally existed among student groups in these districts have been narrowed significantly, while these same districts were successful at raising the standards of achievement for all students (Cawelti & Protheroe, 2001; Fullan, 1999; Joftus, Borders, Feldman, Kilpatrick, Rankin, & Cromer, 1999; Mitchell & Raphael, 1999;

Scheurich, Skrla, & Johnson, 2000a). An extensive array of data documents the processes used by these districts to narrow the racial and income-based achievement gaps, thus compelling educators to seek a deeper understanding of the changes that have made improvements possible. Data that serve as the catalyst for such an understanding of these change processes can be found in the body of literature that provides theories about research-proven reforms promoting student achievement by documenting successful “best practices.”

Four major theories have been suggested as reasonable explanations for these districts’ success.

1. Organizational Learning Disciplines, which includes Personal Mastery, Mental Models, Shared Vision, Team Learning, and Systems Thinking (Senge, 2000; Senge, 1990, pp. 6–10);

2. Correlates of Effective Schools, which incorporates the research work of Brookover, Edmonds, and Lezotte that surfaced five essential factors that serve as benchmarks for schools involved in the process of improvement (Lezotte & Pepperl, 1999, pp.105–118);

3. Total Quality Management in Education, a process that involves focusing on meeting and exceeding customer expectations, continuous improvement, sharing responsibilities with employees, and reducing scrap and rework (Bonstingl, 1996, pp. 95–100; Schargel, 1994); and

4. Focused Equity Practices, which includes the importance of maintaining focus, aligning curriculum with the assessment, increasing the capacity of people to lead, allocating resources appropriately, using data for decisions, holding people accountable, and constantly refining everyone's effort to improve (Scheurich, Skrla, & Johnson, 2000a, p. 23). However, awareness of these theories alone cannot produce results; it is the manner in which a theory is implemented by a district that determines the effectiveness and utility of that theory (Paige, 2000, p. 48). Thus, it is necessary to examine both how these theories were implemented, as well as how these processes allowed each district to procure the desired results of removing the achievement gap.

An analysis of school reform literature evidenced how various districts successfully put these theories into practice and, thus closed the gap among student groups. For example, Brazosport Independent School District in Clute, Texas, developed and customized the 8-Step Instructional Process that encompasses Effective Schools correlates and Total Quality Management (Cawelti & Protheroe, 2001). The achievements of this district have manifested in Brazosport ISD being rated as an *Exemplary* school district for the last 4 consecutive years by the Texas Education Agency (TEA) due to 90% or more of all student groups passing the Texas Assessment of Academic Skills (TAAS) exams in reading, writing, and mathematics (Texas Education Agency [TEA], 2001).

Another example of how a district used systemic management to implement change in the schooling structure and practices that support equitable achievement for all children is found in the endeavors undertaken by Aldine Independent School District in the northwest part of Houston, Texas (Scheurich et al., 2000a). The eleventh largest Texas school district, with more than 52,500 students, 72% identified as economically disadvantaged and 87% as minority, Aldine achieved a *Recognized* status from the TEA for the last 5 consecutive years due to at least 80% of all students and students in each group, African American, Hispanic, White, and Economically Disadvantaged, passing each section of the TAAS. The attainment of *Recognized* status as well as the continued demonstration of growth on the norm referenced assessment of the Iowa Test of Basic Skills was accomplished by Aldine students due in large part to the creation of a shared vision of equitable and excellent classroom learning, in which the adults in the district assumed responsibility for the academic success of all children regardless of their race, culture, home language, gender, or families' income level (Scheurich, 2000).

Background of the Study

The relationship between race/ethnicity and academic achievement has been studied extensively for years (Gibson & Ogbu, 1991). During the past 4 decades, there has been a gradual evolution toward refining research definitions of racial/ethnic groups and, more specifically, toward disaggregating ethnic student group data to the greatest extent possible (Baker, Keller-Wolff, & Wolf-Wendel, 2000). As of 2002, the Academic Excellence Indicator System (AEIS) published by the TEA identifies the race or ethnicity of Texas students as White, Hispanic, or African American. Within these three groups, the TEA identifies students who participate in the federally funded reduced-price or free lunch program as economically disadvantaged.

The rationale for devising a system of identifying students by race and socioeconomic level is to monitor performance differences between students and to hold districts accountable for any gaps in achievement between student groups. The state of Texas, for example, has instituted a statewide test, the TAAS, and has implemented an accountability system that reports student achievement for ethnic and economic student groups as well as for all students. Scott (1998) defined this type of high-stakes testing and public accountability system as “control structures” that are placed upon school districts to examine results of the education system’s work, such as test scores, attendance, dropout rate, and the like. District and campus rating categories of the Texas accountability system include *Exemplary*,

Recognized, Acceptable, and Low Performing. The inclusion of TAAS as part of the accountability system, in addition to the public release of performance results and the exit-level requirement for graduation, marks TAAS as one of the most high-stakes assessments in Texas' history.

Designed in an attempt to confront and to solve equity and excellence issues in the Texas education system, the Texas accountability system has increased the quality of instruction and has to some degree aided in making progress toward closing the state-wide achievement gap (TEA, 2001). However, since the inception of statewide high-stakes testing, children of color continue to score well below their White counterparts (TEA).

These results-oriented control structures, however, do not examine the design of the school system itself to determine if it is capable of achieving its aim. Some educational researchers have asserted that the design of the educational system itself maintains the ethnic and economic achievement gaps (Apple, 1982). For example, when schools systematically expect less of minority and low-income children, those children are placed in remedial classes, labeled for special education classes, and castigated for behaviors that are not familiar to the dominate culture (American Association for Higher Education, 1992; Scheurich et al., 2000a?b?; Skrla, 2001). Furthermore, the failure of a school system to recognize cultural identities or to redistribute resources may only reinforce a system of injustice and in the long term may backfire on those they were intended to help

(Brosio, 2001). Additional evidence of systems acting as gatekeepers for the status quo is exemplified by Cummins (1989), who contended that minority-language students succeed educationally only to the extent that political practices in school systems reverse those practices that legitimize the domination and disablement of members of the minority group as a whole. Thus, districts may inadvertently reinforce the practice of allowing the achievement gap to exist.

Statement of the Problem

Discussions of academic achievement differences between White, Hispanic, and African American students proliferate within the education arena. From the compilation of data from three issues of the education journal, *Educational Evaluation and Policy Analysis*, the following race-related conclusions emerged on a national level:

1. Using data from the National Educational Longitudinal Study of 1988 (NELS 88), researchers found that Hispanic students do less well than White students in spatial-mechanical reasoning, perform comparably to White students in quantitative science, and do less well than White students in basic knowledge reasoning on the multiple-choice components of the NAEP math and science tests (Hamilton, 1998, as cited by Baker et al., 2000).

2. Using NAEP data, Asian students were found to be more likely than White students, and Hispanic students less likely than White students, to attend a school where algebra is offered and where math teachers majored in math (Raudenbush et al., 1998, as cited by Baker et al., 2000).
3. Using the High School and Beyond data set, researchers concluded that Black men experience 13% lower earnings than White men, and Black women have 22% lower earnings than White women. There were no significant differences between Latinos and Whites for either gender in regard to earnings (Miller, 1998, as cited by Baker et al., 2000).

Not coincidentally, an analysis of data from Texas schools mirrored the national achievement gap. Since the inception of the Texas accountability system in 1994, few districts have achieved a rating of *Exemplary*, which requires that 90% of all students score a minimum passing rate in reading, math, and writing. These scores must include all population groups, including students in the following groups: Hispanic, African American, White, and Economically Disadvantaged. Additionally, attendance must be higher than 94%, and the dropout rate must be lower than 2%. A rating of *Recognized* is similar, but requires a passing rate of 80% by the respective student groups. The discrepancies inherent in standardized test scores such as the TAAS among poor children and children of color provide a focus for education reform. According to the 2000–2001 state performance report from the TEA AEIS, 49% of Texas children are Economically

Disadvantaged. The AEIS data also showed that only 73% of these students identified as Economically Disadvantaged passed the TAAS. Furthermore, 2000–2001 AEIS data showed that the state-wide percentage of third-grade African American children who passed the reading and math TAAS was only 63%, compared to a 72% passing rate by Hispanic children, and a 87% passing rate by White children. State-wide, this gap between African American, Hispanic, and White children is apparent at every grade level, and although it has narrowed over the last 8 years, this gap indicates that there continues to be inequity in the educational system. These outcomes cause an even higher level of concern when considering that the Texas Assessment of Knowledge and Skills (TAKS), the new accountability test that will be given to Texas children beginning in 2003, will cover more of the state curriculum, require more reasoning proficiency, and is much more rigorous than the current TAAS test.

Educators are fervently attempting to find ways to have all schools meet these standards and, thus, improve the quality of education for all children. Currently, there are numerous reform attempts at district and state levels to align curricula with texts, tests, and instructional goals; to increase testing at state and national levels; and to evaluate teacher effectiveness practices and curriculum construction (Elmore & McLaughlin, 1988; Honig, 1985; Kliebard, 1986; Slavin, 1989; Timar & Kirp, 1989). Yet the majority of school districts find that the implementation of most of these reform attempts fails to remove the problems they

were intended to solve (Cuban, 1990). One explanation addressing the issue of failed reform efforts was offered by Tyack (1974), who has documented how management systems, bureaucracies, and leadership models from corporate America have been embedded in school, often perpetuating class, race, and gender differentiation. A second explanation for why reform attempts often fail and why the achievement gap continues to exist is found in what Valencia (1997) has called “deficit thinking,” which asserts that academic inadequacy is due to internal deficiencies within the student.

Purpose of the Study

While acknowledging that most district reform attempts have failed, the purpose of this study was to understand how one Texas school district has been consistently successful in reforming the education system for all student groups and thus has eliminated the achievement gap. Further rationale for the study involved the necessity to identify district-wide systemic reform measures used by practitioners that have successfully reversed social patterns that use power to enforce social inequity. This was accomplished by identifying the district-level cross-functional (interconnected) processes and operational (isolated) processes of an education system that has effectively eliminated the achievement gap between African American, Hispanic, and White students. More specifically, the study identified the district practices that affect one department, area, or function or

more than one department, area, or function in the school district. The late W.

Edwards Deming asserted,

Schools should be a place where students, teachers, administrators, and others are able to take pride and joy in their work. It is the responsibility of administrators—the top management of schools—to remove the barriers that prevent this from being the daily experience of students and teachers. (as quoted in Bonstingl, 1996, p. 19)

Research Questions

A qualitative research methodology, grounded theory, which was created by Strauss and Glasser, offers a systematic method by which to study the richness and diversity of human experience and to generate relevant, plausible theory which can be used to understand the contextual reality of social behavior (Hutchinson, 1988). Strauss and Corbin (1990) contended that

grounded theory is inductively derived from the study of phenomenon it represents. That is, it is discovered, developed, and provisionally verified through systematic data collection and analysis of data pertaining to that phenomenon. Therefore, data collection, analysis, and theory stand in reciprocal relationship with each other. One does not begin with a theory, then prove it. Rather, one begins with an area of study and what is relevant to that area is allowed to emerge. (p. 23)

Specifically, this grounded theory approach was utilized while collecting data that led to the discovery of how one Texas school district was able to completely eliminate the achievement gaps between poor, minority, and White students. The information that was gathered facilitated the discovery of relevant categories and the relationships among them to put together categories in new,

rather than standard, ways. These new categories precisely make up the grounded theory. Using coding techniques, the theory was built using data gathered through face-to-face interviews and observations. According to Strauss and Corbin (1998), the rationales for coding are as follows:

1. Build rather than test theory;
2. Provide researchers with analytic tools for handling masses of raw data;
3. Help analysts to consider alternative meanings of phenomena;
4. Be systematic and creative simultaneously; and
5. Identify, develop, and relate the concepts that are the building blocks of theory. (p. 13)

Design of the Study

This was a single case study that utilized qualitative methodology. It was a study of one school district in Texas that has completely eliminated the achievement gap between all ethnic student groups for 5 consecutive years. Interviews were conducted with administration, faculty and staff, school board members, and community members through purposeful sampling. The interviews were conducted individually and lasted approximately 1–2 hours. Data collection also involved observations of relevant meetings and analysis of appropriate documents. Through these processes, data regarding knowledge and understanding of how the district was successful in closing the achievement gap were collected and analyzed. The researcher served as the primary research instrument. Field notes were coded in an effort to create and elaborate analytic themes that served as

building blocks for constructing the qualitative narrative (Emerson, et al., 1995).

The steps involved in this process included writing out initial statements of analytic themes, then selecting, explicating, sequencing, and editing fieldnote excerpts in order to build up a series of thematically organized units of excerpts and analytic commentary (Emerson et al., 1995). The research methods that were employed in this study are more fully described in chapter 3 of this paper.

Scope of the Study

Limitations

The limitations of this study include those inherent in the use of qualitative methodologies and the limited number of cases studied. Being a single case study, it does not represent all districts in Texas. Due to their nature, case studies may not be generalizable to every instance in the larger population, but case studies can establish at least the limiting cases relevant to a given situation (Guba, as quoted in Patton, 1980). Furthermore, all schools and their situations are unique and employ their own unique combination of theories, tools, and methods for learning (Senge, 2000). No school's experience can be totally applied to another's situation. This study was also limited to interviews with selected district leaders and, therefore, does not necessarily reflect the understandings and experiences of other district staff members.

Significance of the Study

This study examined how and why one district has been successful at closing the achievement gap when countless other districts continue to strive to accomplish this task but fail. This case study can be used by other school districts, reducing the time needed to affect improvement and building in a measure of assurance that the improvement effort will yield high performance. Furthermore, this study contributes to the growing body of literature regarding district reform and provides evidence that the achievement gap between all student groups can be completely eradicated.

Definition of Terms

Achievement gap: differences in academic achievement between middle-class or affluent Anglo students and economically disadvantaged, African-American, or Hispanic students.

Alignment: consistency of plans, processes, information, resource decisions, actions, results, analysis, and learning to support key organization-wide goals.

Benchmarking: an improvement process in which a company measures its performance against that of best-in-class companies, determining how those companies achieved their performance levels.

Continuous improvement: the ongoing improvement of products, services, or processes through incremental and breakthrough improvements.

Credibility: alignment of findings and the constructed reality of the respondent.

Cross functional process: a process that affects more than one department, area, or function in a system.

Customer satisfaction: the result of delivering a product or service that meets customer requirements.

Empowerment: a condition whereby employees have the authority to make decisions and take action in their work areas without prior approval.

Leadership: organization leaders must establish a vision, communicate that vision to those in the organization, and provide the tools and knowledge necessary to accomplish the vision.

NAEP: National Assessment of Educational Progress. *Naturalistic study*: qualitative methodology for studying the human context and constructing shared realities with the human beings in that context.

Operational process: a process that affects the operation of one department, area, or function.

Organizational excellence: the management of a system to maximize the quality of the system's processes and products to meet or exceed the needs and expectations of the system's customer/clients.

Quality: a subjective term for which each person has his or her own definition. In technical usage, quality can mean the characteristics of a product or service that bear on its ability to satisfy stated or implied needs. By dictionary definition it means the degree of excellence of a thing.

Strategic planning: a voluntary commitment by an organization to use a specific discipline and process to constantly recreate itself to achieve a common purpose.

System: a collection of processes and people that are aligned towards serving a common purpose or aim. The system level of public education is the district.

Systems thinking: understanding that systems are a network of processes and people that work together to achieve goals.

TAAS: Texas Assessment of Academic Skills. *TEA*: Texas Education Agency. *Transferability*: the observations of the researcher that may relate meaningfully to other situations.

Triangulation: seeking out multiple sources to provide insight into a specific event.

Working hypothesis: hypothesis that may change over time as data is gathered and analyzed.

Summary

While many reform efforts such as site-based management, outcome-based education, and the like have attempted to improve identified areas of the public education system, few have attempted to examine and to improve the entire district. Because no one program or model used in isolation has been proven effective for systemic transformation, the premise of this study was to examine the management components of a Texas school district that has been successful in eliminating the achievement gap between African Americans, Hispanics, and Whites.

Chapter 2: Review of the Literature

Evidence of the Achievement Gap

One of the most critical issues faced by educators is the persistent inequity evident in the achievement differences between racial, ethnic, and socioeconomic student groups (Fuller, 2001; Jacobson et al., 2002; Ream, 2001; Skrla, 2001). This inequity is still prevalent in U.S. schools even after decades of court-ordered desegregation and numerous federal mandates targeted to provide all children, regardless of race, ethnicity, or socioeconomic status, equal access to a quality education. Despite the efforts of various policymakers, researchers, and educators nationwide, evidence of inequity among African American and Hispanic students is not only found in test scores, but also in dramatically higher rates of suspension, expulsion, retention, dropout, and special education assignment; and in lower grade point averages than White students (Ferguson, 2001; Jencks, 1998; Lee, 2002; Midgette & Glenn, 1993; Mitchell, Bush, & Bush, 2002; National Center for Education Statistics, 1999; Scheurich, 1998; Skrla, 2001). While the original goal of court-ordered integration was equal education, the National Association of the Advancement of Colored People (NAACP) issued a statement asserting that the nation has a long way to go to comply with the spirit of *Brown v. Board of Education of Topeka, Kansas*, the 1954 case that outlawed segregation (Cobb, 2002).

Undoubtedly, discrepancies in educational achievement between children of color and White children validate this assertion. For example, The Education Trust reported that in 1999, upon the completion of high school, only 1 in 50 Hispanic and 1 in 100 African American 17-year-olds could read and gain information from specialized text, compared to about 1 in 12 Whites; further, from this sample of individuals, 1 in 30 Hispanics and 1 in 100 African Americans could comfortably do multi-step problem solving and elementary algebra, compared to about 1 in 10 White students (Haycock, 2001). Additionally, the most recently available 1999 comparison study from the National Center for Educational Statistics indicated that 17-year old Black children, as a group, scored 31 points below their White counterparts on the mathematics and reading sections of the NAEP, while Hispanic children, as a group, scored 24 points below White children in reading and 22 points below White children in mathematics (NCES, 1999).

However, over the last 4 decades, trends in the achievement gap measured by national average test-score differences between racial and ethnic groups based on the NAEP and the Scholastic Aptitude Test (SAT) indicate that Black-White and Hispanic-White achievement gaps narrowed in the 1970s and 1980s, but then stabilized or widened in the 1990s (see Figure 1). In “Race, Class, and Gender in American Educational Research,” McCarthy and Apple (1998) attempted to explain the narrowing of the national achievement gap in the 1970s by espousing

that radical educators in the United States adopted a more culturalist approach to education beginning in the 1970s in an attempt to deal with exploding realities caused in part by the emergence of formerly marginalized persons. Additional explanations for the narrowing then widening of the achievement gap have been offered by Lee (2002), who has noted that during the period 1971–1988, White students’ achievement level was flat, whereas African American and Hispanic children made substantial academic gains. In contrast, during 1988–1999, when the gap grew, the pattern reversed: White students improved their achievement, but Black and Hispanic children made few gains on NAEP (Lee).

Other achievement gap trends are illustrated in the study by Jacobson, Olsen, Rice, Sweetland, and Ralph (2002), which showed that typically the achievement gap narrows during elementary school, followed by a widening of the gap during middle school and little change during high school, implying that Black-White and Hispanic-White disparities in educational achievement typically increase as children progress through elementary and secondary school. Ferguson (2001) suggested that the reasons inherent in this regression in achievement lie in the limited repertoires educators use in helping the less well prepared to catch up, often functioning in ways that exacerbate initial differences. The problem of limited repertoires may be most severe for teachers who are unfamiliar with children’s home cultures and languages and who may therefore be at greater risk

of misjudging children developmentally and teaching them inappropriately (Ferguson, 2001; Jacobson et al.).

This iniquitous act of not meeting the educational needs of entire groups of students has far-reaching implications beyond the classroom, primarily due to the fact that the National Urban League in New York City has contended stalwartly that a solid education is essential in order to succeed in the Information Age economy of the 21st century (Price, 2001). Likewise, over the past 2 decades, Black-White and Hispanic-White differences in educational achievement have been strongly associated with Black-White and Hispanic-White disparities in a variety of educational and economic outcomes (Haycock, 2001). Such achievement differences do not necessarily cause gaps in educational attainment, employment, or earnings, but they do reflect a set of circumstances responsible for Black-White and Hispanic-White disparities in academia and the economy (Jacobson et al., 2002). This disparity was evident in the 2000 U.S. Census Bureau report that indicated a national median income for White males is \$31,213, while Black males earned an average of \$21,659 and Hispanic males earned \$19,829 annually. Not as profound, yet equally important, is the difference in income for females. The average annual income for White females is \$30,777, while Black females earn only \$25,736 and Hispanic females earn only \$21,025.

Acknowledging this information has led many sociologists and civil rights experts to believe that the pursuit of an equal education for all racial and ethnic

groups has been slowed by an economic divide even tougher to breach than race (Cobb, 2002). In light of the 2001 Texas State Data Center Population Estimates and Projections Program predicting that by the year 2040 individuals of Hispanic decent will be the majority in Texas, the economic well-being of Texas soon will rest on the shoulders of Hispanic wage earners. While fairness was the goal of early public school desegregation, the stronger motivation for education equity may prove to be the state's economy (Cobb; Scheurich et al., 2000a). Realizing that shrinking the achievement gap would almost certainly reduce racial inequality in educational attainment and earnings (Jencks & Phillips, 1998), it is particularly relevant to address the probable contributing causes of Black-White and Hispanic-White achievement differences in an effort to narrow gaps in educational performance and in subsequent labor market outcomes, to provide greater access to key resources, and to rectify the socioeconomic injustices rooted in the political economy (Fraser, 1995; Jacobson et al., 2002).

While many educational leaders have antiquated and blatantly wrong notions about why achievement gaps among student groups exist (Haycock, 2001), the literature has suggested that possible explanations for these differences in achievement include, but are definitely not limited to, a combination of the following: (a) differences in the home environments (Ferguson, 2001; Jacobson et al., 2002), (b) covert or overt racism (Jencks & Phillips, 1998; Lee, 2002), and (c) teacher quality (Fuller, 2001; Skrla, 2001). A 2001 Gallop Poll found that the

general opinion of Whites around the country regarding the primary reason for the achievement gap among student groups was that it is due to the children themselves and their families—in essence blaming the victim. Not surprisingly, 85% of the White respondents indicated that in general they believe that Black children have as good a chance as White children in their community to get a good education. In stark contrast, a mere 52% of the Black respondents believed this to be true.

More evidence of blaming the victim is substantiated by a 2001 survey conducted by the Center on Education Policy, which indicated that three fourths of the people polled believed that the achievement gap between racial and ethnic groups was related to factors other than the quality of schooling (Haycock). Those factors deemed by popular opinion to cause and to perpetuate the achievement gap between Blacks and Whites and Hispanics and Whites echo the Gallop Poll results, and thus include socioeconomic status, family conditions, student behavior, and residential mobility (Lee, 2002; Ream, 2001).

Rather than addressing the social conditions and treatment of marginalized groups of Americans which have ultimately manifested in the well documented poverty, underachievement, and hostility of Blacks and Hispanics, some individuals choose to speculate reasons for the achievement gap such as those exemplified by Herrnstein and Murray (1994) who argued in their book, *The Bell Curve*, that success and failure in the United States, including class and racial

differences in performance, is largely determined by genetic endowment. In contrast, all but a few scientists strongly believe that overwhelming evidence indicates no genetic differences by race or ethnicity, particularly differences in intelligence (Goodman, 2000; Rosenthal 1996). For example, Mensh & Mensh (1991), Kamin (1974), Gould (1996), and Valencia (1997) have debunked the arguments Herrnstein and Murray made about IQ in *The Bell Curve*, and have demonstrated how IQ tests historically have been used as a weapon of racism and class domination. This notion of supposed racial difference in IQ vanishes, however, if there is a control for socioeconomic variables (Mercer, 1979). Yet the most conclusive evidence has been presented by scientists such as Richard Lewontin, Ruth Hubbard, and Howard Taylor, who have demonstrated irrefutably that there is no scientific basis for any claims of a genetic, hereditary component of variations in “intelligence” (Cavalli-Sforza, Menozzi, & Piazza, 1995; Naureckas, 1995; Reed, 1994; Rosenthal, 1996).

While this historically based overt bigotry led to the inequities associated with race and socioeconomic status that have depressed the skills, knowledge, and commitments of some parents and teachers to provide all children with high-quality opportunities to learn both at home and at school, covert racism has been found to be just as crippling (Ferguson, 2001). For example, many educators truly do not believe all children can learn or do not expect all children to learn. That nonbelief and low expectation is communicated, either overtly or subtly, to the

children (Ferguson; Haycock, 2001; Morefield, 2002). Furthermore, because all racial, ethnic, and cultural groups have deeply held beliefs about other groups, those beliefs influence the context in which those groups are viewed (Jencks & Phillips, 1998). In particular, there is a long tradition of viewing African American and Hispanic children as deficient, as opposed to different, from White middle-class children (Valencia, 1997). Failure to perceive Black children in the context of their cultural experience has created the expectation that they are really White children in “blackface” (Hale-Benson, 1990). This phenomena leads to what McDermott (1987) described: A child achieves pariah status or becomes a low-caste social exile, neither totally ascribed nor naturally acquired by the child, through interethnic code differences that cause miscommunication between the teacher and the child. This miscommunication undermines the relationship until the affected child begins to form alternatives to the teacher’s organization of the classroom in an attempt to become visible. Obviously, this results in more condemnation of the child’s behavior and the teacher becomes the administrator in charge of failure. Thus, school success is the essential ingredient in any child’s avoidance of pariah status, and the success is dependent upon high levels of information transfer between the teacher and the child. Further research has backed this assertion that teachers who are understanding of and show sensitivity to the cultural background of students are more successful than those teachers who lack such understanding and sensitivity (Deering, 1997).

However, understanding and sensitivity to cultural background are not synonymous with permissiveness. Far too many children of color have been allowed to be less than they could be due to the unwillingness of teachers to be firm and consistent (Morefield, 2002). For instance, many teachers feel sorry for disadvantaged students and give them lots of emotional support but do not expect or push them to achieve at standard academic levels (Ferguson, 2001). What teachers do matters enormously, and what matters most is good teaching, as noted by U.S. Secretary of Education, Rod Paige, who has contended that the key to closing the achievement gap is good teaching—children who do not score well have not been taught well (Cobb, 2002). This notion is daunting when considering that many inner-city schools serving large numbers of poor and minority students have trouble attracting and retaining highly skilled teachers and that many of the teachers who do teach this population are not proficient academically in the subjects they teach (Ferguson, 2001; Fuller, 2001; Haycock, 2001; Jencks & Phillips, 1998; National Commission on Teaching and America's Future, 1996; Skrla, 2001). Further inequity and reasoning behind the achievement gap is illustrated in predominantly Black schools enrolling far more children with severe academic and behavioral problems who consume more resources than the average child, and thus, Black children without special problems are likely to be in larger classes, and receive less attention and far lower levels of exposure, coverage, and

quality of instruction compared to similar White children (Jencks & Phillips; Wang, 1998).

Consequently, as these children grow older, they become increasingly more aware that achievement differences correlate with group characteristics, and they tend to accept stereotypical assumptions and assertions about the sources and implications of such differences (Ferguson, 2001). For this reason, the state and federal governments have enacted legislation designed specifically to combat the perpetual cycle inherent in the achievement gap. The *Texas Education Code*, Section 4.001 (b) states,

All Texas students will be provided a quality education that enables them to achieve their potential and fully participate in the social, economic, and cultural activities of our state and nation. To make high quality education possible for all students, Texas support for public education must be adequate, equitable, and efficient. The state's public education system must meet the twin challenges of closing the achievement gap and raising the standard of excellence for all students.

Likewise, as part of the *No Child Left Behind Act*, the centerpiece of President Bush's education agenda, all schools must make measurable progress in closing the gap among students of various income and racial groups within specific timeframes. Unprecedented in the degree of bipartisan support, the implementation of the *No Child Left Behind Act* is intended to force school districts across the country, under sanctions if necessary, to provide whatever faculty, facilities, and special programs are needed to equalize student performance.

Districts Successful in Closing the Achievement Gap

This national pledge of increased access to education for all children is exemplified in various districts across the nation. Increasingly, whole districts, not just individual schools, are performing at high standards. Five recent studies have shown that some of the school districts that had drawn criticism due to low performance have seen progressive and sustained student improvement for poor and minority students in school districts that have put effective reforms in place and supported them consistently over time (Cawelti & Protheroe, 2001; Fullan, 1999; Joftus, et al., 1999; Mitchell & Raphael, 1999; Scheurich et al., 2000a?b?).

For example, in 1999 the U.S. Department of Education contracted with the McKenzie Group to conduct a study of large urban districts in order to learn about major reform initiatives taking place in those districts (Joftus et al., 1999). The criteria for selecting the districts consisted of the districts (a) being among the largest school districts in the country in terms of student population; (b) having student populations that were at least 35% minority with at least 50% of students eligible for free or reduced-price lunches, (c) being geographically diverse, and (d) having at least 3 years of student achievement data on the same assessment and across the same grades in reading and mathematics for elementary and middle school students. From these criteria, 13 districts were selected for the study, hence the title: *Student Achievement and Reform Trends in Thirteen Urban Districts*.

Of these 13 districts studied (Joftus et al., 1999), 10 showed increases in the percentage of elementary and middle school students in the highest poverty schools meeting the district or state proficiency standard in either mathematics or reading. Of these 10 districts, 7 narrowed the achievement gap between elementary students in the high- poverty and low-poverty schools, and 6 of the 10 districts showed the same narrowing between middle school students. Likewise, 6 districts showed increases in the percentage of elementary school students in the highest poverty schools demonstrating improvement in both mathematics and reading, and 5 districts showed the same increases for middle school students. Furthermore, 4 of these 6 districts showed a narrowing of the achievement gap between high- and low-poverty schools in the elementary grades, while only 2 of the 5 districts showed a narrowing of the achievement gap between high- and low-poverty schools in the middle schools.

In addition to analyzing student achievement in the 13 districts, the McKenzie Group (Joftus et al., 1999) studied the implementation of standards-based reforms regarding the leadership, policies, and strategies that led to the improved quality of student achievement. The major reform lessons learned from the study districts were as follows:

1. District administrators believe their districts have high standards for all students.

2. Most district administrators believe that their district's assessments and curricula are aligned with their standards.
3. While few districts have put standards fully into place, the majority of district administrators claim to have made significant progress.
4. District administrators believe their districts have made great strides in the use of data to improve schools.
5. Districts are seeking to include a higher percentage of their students in their assessment systems.
6. District administrators' long-range plans are linked to district achievement goals and aligned with state plans.
7. Districts have made professional development a top priority and are continuously examining ways to improve the quality of instruction.
8. Districts are engaging their communities on a variety of education issues, such as rigorous standards, resources for students, and school safety.
9. In an effort to regain the public's confidence in public schools, states and districts are designing comprehensive accountability systems to evaluate the performance of schools and instructional staff.
10. Districts require adequate funding from the states to implement reforms and to meet mandates.
11. Districts are making significant efforts to align resources with goals while ensuring equity among schools.

12. Title I is both a financial “lifeboat” and a catalyst for systemic reform, providing districts with much-needed financial resources and incentives for developing standards-based accountability systems.
13. Districts believe continuity in senior leadership at the state and district levels and building collaborative relationships with stakeholders are keys to successful school reform (Joftus et al., 1999).

These 13 districts serving huge numbers of poor and minority students and ever-increasing immigrant populations, including students with limited English proficiency, appear to have taken important steps in raising standards and implementing standards-based reforms. Moreover, these initiatives seem to have helped raise the achievement of all students and, most encouragingly, have had the biggest effect on students in the highest poverty schools.

Another study that focused on the district as the locus of change was *High Student Achievement: How Six School Districts Changed into High-Performance Systems* by Gordon Cawelti and Nancy Protheroe (1999). Cawelti and Protheroe sought to identify high-achieving school districts and to record the actions that led to remarkably rapid improvement in student achievement. Nominations provided by regional education laboratories, chief state school officers, and state education agency assessment officials identified only four districts where standardized test scores in most schools had increased by at least 20%: Brazosport ISD, Clute, Texas; Twin Falls SD, Twin Falls, Idaho; Ysleta ISD, El Paso, Texas; and Barbour

County SD, Philippi, West Virginia. Because no large urban school districts were nominated, the authors added two that had demonstrated significant improvement in many schools: Houston ISD in Texas and Sacramento ISD in California. The districts profiled in the study proved that districts serving significant numbers of students from low-income families can organize themselves so that high standards for all students are expected in all of their schools and substantial progress can be made toward narrowing the achievement gap on standardized test scores typically found between White, middle-class students and minority youth or those from poor families.

Common themes clearly emerged about the characteristics of high-achieving organizations, such as a focus on clear standards and procedures to assess progress toward these standards. While assessments such as high-stakes testing are not inclusive of various state accountability systems, Cawelti and Protheroe (1999) contended that state-wide accountability and testing do provide measures of how well—or how poorly—districts have been able to educate all their children. The central finding of the study regarding testing was that large gains in test scores require (a) extensive efforts to align instruction with the test content, (b) detailed analysis of student responses to the tests or assessments designed to parallel these, and (c) the provision of immediate and appropriate corrective instruction for individual students as indicated by that analysis. In the district studies, these test-driven elements formed the basis for district, school, and

classroom efforts to improve student achievement as measured by scores on mandated tests. However, the most significant finding in the study was the verification that it is possible to achieve success for students typically characterized as being at-risk, with success measured by scores on standardized tests. By sharing the belief that the achievement gap can be narrowed, restructuring the entire system for full accountability, and using often underutilized knowledge bases, each of the districts involved in the study was able to transform the entire system into a high-performing learning environment.

Concerned with this concept of entire system or whole-district reform, Fullan (1999) examined several examples of large-scale reform efforts in school districts. One prominent example of system-wide instructional reform was documented in Burney and Elmore's (1998) study, *Continuous Improvement in Community District #2, New York City*. A major component of that reform initiative was extensive staff development, which included requiring all staff to spend 3 weeks of concentrated observation and supervision practice in learning new ideas in a professional development laboratory, receiving instructional consulting services, engaging in peer support networks and off-site training; as well as having district staff visit schools 2 days a week reviewing plans and assessment data, visiting classrooms, and discussing future steps with principals. This improvement strategy was data driven and focused on interaction and capacity building of all stakeholders.

Another example of successful systemic reform identified by Fullan (1999) involved the Bryk, Easton, Kerbow, Rollow, and Bender 1998 study, *Charting Chicago School Reform*. This study showed that after 6 years of decentralization, the role of the central office shifted from policing the schools within the district to supporting their needs through capacity building and external accountability. The central office engaged in specific activities to provide extra support for the schools in the district:

1. The district developed policies, procedures, and goals to support local school reform within the context of district-level expectations.
2. Local school professionals worked cooperatively toward more coherent school practices and effectively engaged parents and the local community in the improvements.
3. The local schools had a rigorous system for external accountability that advanced local capacity building rather than undermining it.
4. The district sought to initiate local school innovations and disseminate effective improvement efforts without mandating specific programs.

In addition to the previously mentioned studies, another study, *Goals 2000: Case Studies of Promising Districts*, written by Mitchell and Raphael in 2000, identified the policies, practices, and procedures of nine promising Goals 2000 subgrantees. Nine districts demonstrating the successful implementation of systemic standards-based reform were chosen for the study. The common

characteristics of the systemic reform efforts made by the nine districts included aligning local curriculum and benchmarks with state or national standards, using data to make decisions, implementing research-based professional development, and establishing and maintaining social capital. While several federal, state, and local policy issues emerged from the findings, of particular importance was the finding showing the significant role districts play in implementing systemic standards-based reform.

Finally, the most relevant study of school reform that has resulted in closing the achievement gap was a study of four Texas school districts, *Equity-Driven Achievement-Focused School Districts* (Scheurich et al., 2000a).

Commissioned by the Charles A. Dana Center and the University of Texas at Austin, Scheurich et al. substantiated district-wide academic success in districts serving primarily children of color and children from economically disadvantaged families. The following narrative details the key findings that emerged from the study.

The public release of district accountability ratings disaggregated by race, gender, and socioeconomic status and the various sanctions that can be imposed on low-performing schools and districts prompted the districts to make changes to ensure the success of all students (Scheurich et al., 2000a). Thus, the state accountability system acted as the driving force that impelled the districts to ensure equity and high academic achievement for all students. Additionally, upon

the public release of the TAAS passing rates, which illustrated significant differences for African American and Hispanic children compared to the White students in the district, various local and state stakeholders demanded equitable school environments.

In a state that is becoming increasingly diverse in terms of race and ethnicity, the motivating dynamics of local equity catalysts and the state accountability system compelled district leaders to develop an ethical responsibility to ensure excellence and equity for all student groups. This ethical response materialized in the utilization of key elements that led to the transformation of the study districts, including research-based teaching and learning practices implemented in the classroom, sharing a belief in equity, implementing focused equity practices, finding multiple ways to achieve specific learning goals, supporting the paradigm shift among the professional staff, and identifying the new roles of all stakeholders. The most discernible finding, however, was that the districts strove to make equity and excellence a common occurrence in schools every day. Scheurich et al. (2000a) pointed to evidences of the accomplishments these districts have made in closing the achievement gap among students groups as proof that other districts that have been historically unsuccessful in the past can change their everyday beliefs and practices and thus provide every child with an equitable education.

A synthesis of the findings from these five studies suggests that the implementation of various components of organizational and educational theories is responsible for the successful reform efforts that assisted the districts in closing the achievement gap. The four theories that appear to have been applied in part or in whole are (a) organizational learning disciplines (Senge, 1990, 2000), (b) correlates of effective schools (Lezotte, 1991), (c) total quality management in education (Bonstingl, 1994; Schargel, 1994), and (d) focused equity practices (Scheurich et al., 2000a). These theories, as well as many others, have been included repeatedly in numerous district mission statements, strategic plans, or board agendas, yet very few districts have been able to close or even to narrow the achievement gap. This suggests that the implementation, commitment, and lens through which districts view these theories may not be consistent with the practices that actually yield positive results. The numerous failed reform strategies assumed by a plethora of districts also suggest that an eclectic approach to reform that is centered on remedying past discrimination by treating all children with respect and ardently providing them with equal opportunity and motivation to benefit academically and socially—regardless of the compulsory social conditions rendered by the dominate culture—must be undertaken in order to close the achievement gap. Thus, as evidenced in the five studies, the academic achievement of students who historically have been denied the benefit of an equitable education seems to be the result of the amalgamation and effective implementation of these

four theories. The following section functions as a description for each of these premises.

Organizational Learning Disciplines

According to Peter Senge (1990), learning organizations are

organizations where people continually expand their capacity to create the results they truly desire, where new and expansive patterns of thinking are nurtured, where collective aspiration is set free, and where people are continually learning to see the whole together (p. 3).

Living in an age of rapid change and increasing technological advances, organizations that are flexible, adaptive, and productive will be able to adapt to these transformations and even to excel as a result of possessing the ability to “tap into people’s commitment and capacity to learn at *all* levels” (Senge, 1990, p. 4). Creating an organization that is continually expanding its capacity and allows reflection and engagement requires equipping the members of the organization with tools and guiding ideas to make sense of the situations they face (Jones, 2001). Senge contended that both individuals and organizations can recreate themselves by mastering certain basic disciplines (Garvin, 1994).

Thus, Senge (1990) identified five disciplines as collaborative practices that innovate learning organizations. The first discipline includes personal mastery.

This discipline involves visualizing desired results or goals and then comparing what is wanted to reality, or what actually exists, in an effort to expand the capacity to make better choices that will result in achieving the desired result. Second, Senge (1990) described mental models, “deeply ingrained assumptions, generalizations, or even pictures and images that influence how we understand the world and how we take action” (p. 8). By looking inward and learning to bring perceptions and attitudes to the surface and then effectively communicating that view to others, it is then possible to learn new skills and to develop new orientations in order to create institutional changes. A third discipline is a shared vision that has the power to be uplifting, encourages experimentation and innovation, increases clarity of purpose, and generates enthusiasm and commitment by influencing others in the organization. Senge (1990) contended, “As people talk, the vision grows clearer. As it gets clearer, enthusiasm for its benefits grow” (p. 227). When organizations can apply system thinking, achieving the vision becomes possible. Additionally, the discipline of team learning is considered “the process of aligning and developing the capacities of a team to create the results its members truly desire” (Senge, 1990, p. 236). It is a collaborative practice that builds on personal mastery and shared vision. When teams learn together, the organization and the members of the organization grow more rapidly than could have occurred otherwise (Argyris & Schon, 1978). Finally, the fifth disciple, systems thinking, is the discipline that fuses all the

others together into the theory and practices that examine the interrelationship between the parts and the whole system by using conceptual frameworks and systems-thinking tools to clarify patterns in order to understand how to change undesirable patterns most effectively (Senge, 1990).

Correlates of Effective Schools

In 1966, Coleman et al. published “The Equal Educational Opportunity Survey,” which assessed the availability of equal educational opportunities in the public schools for aggregate groups such as African American, Hispanic, and poor students. This investigation, commonly referred to as the Coleman Report, concluded, among other race-related suppositions, that family background, not the school, was the major determinant of student achievement (Grissmer et al., 1998). This notion that schools did not make a difference in predicting student achievement led to various compensatory programs, provided chiefly through Title I of the Elementary and Secondary Education Act, which attempted to coerce low-income children to learn in ways that conformed to most schools’ preferred ways of teaching, focused on changing students’ behavior in order to compensate for their disadvantaged backgrounds, and made no effort to change school behavior (Edmonds, 1982). Regarded as the most significant education study of the 20th century, the report stimulated a vigorous reaction, instigating researchers such as

Brookover, Edmonds, and Lezotte to conduct studies identifying the common characteristics among effective schools. These studies refuted the claims documented in the Coleman Report and further asserted that all children can learn and that the school emphatically does control the factors necessary to assure student mastery of the core curriculum (Lezotte, 1997). These philosophies, policies, and practices common among effective schools eventually became known as the Correlates of Effective Schools:

1. Safe and orderly environment
2. Climate of high expectations
3. Instructional leadership
4. Clear and focused mission
5. Opportunity to learn and student time on task
6. Frequent monitoring of student progress
7. Positive home–school relations (Lezotte & Pepperl, 1999).

These correlates are critical to the effective school because they represent the leading organizational and contextual indicators that have been shown to influence student learning (Lezotte, 1997). Furthermore, the individual correlates are not independent of one another, but are interdependent in that the successful implementation of one correlate may be contingent upon the successful implementation of another correlate (Lezotte & Jacoby, 1990). Auxiliary substantiation of interrelatedness is evident in what Lezotte (1991) defined as first-

generation and second-generation correlates of effective schools. The utility of this generational concept functions to expand the initial seven correlates into the second-generation correlates in an attempt to incorporate more recent research and school improvement findings and offer an additionally challenging developmental state to which schools committed to the “learning of all” mission may aspire (Lezotte, 1991). Below is a detailed narrative of each of the seven correlates, differentiated by first-generation implementation and second-generation implementation.

1. Safe and Orderly Environment

The first generation. In the effective school there is an orderly, purposeful, businesslike atmosphere, which is free from the threat of physical harm. The school climate is not oppressive and is conducive to teaching and learning.

The second generation. The concept of a school environment conducive to learning for all must move beyond the elimination of undesirable behaviors by placing increased emphasis on the presence of certain desirable behaviors. The adults’ collaborative behaviors in their own professional working relationships create more cooperative environments for both the adults and students by respecting human diversity and appreciating democratic values.

2. Climate of High Expectations for Success

The first generation. In the effective school there is a climate of expectation in which the staff believes and demonstrates that all students can attain mastery of the essential school skills, and the staff also believes that they have the capability to help all students achieve that mastery.

The second generation. In order to guarantee that all students achieve mastery, the school's response to students' inability to master concepts is the implementation of additional strategies such as reteaching and regrouping. Such manifold responses involve teacher efficacy and high expectations for themselves as well as their students and the school organization being structured in such as way as to assure that teachers have support and access to tools and strategies to help them not only instruct students but to achieve learning for all.

3. Instructional Leadership

First generation. In the effective school, the principal acts as an instructional leader and effectively and persistently communicates that mission to the staff, parents, and students. The principal understands and applies the characteristics of instructional effectiveness in the management of the instructional program.

Second generation. While instructional leadership remains important, the concept is broadened and leadership is viewed as a dispersed concept that includes

all adults, especially the teachers. This broader concept of leadership recognizes that leadership is always delegated from the followers in any organization and that expertise is generally distributed among many, not concentrated in a single person.

4. Clear and Focused Mission

First generation. The effective school has a clearly articulated school mission through which the staff shares an understanding of and commitment to the instructional goals, priorities, assessment procedures, and accountability. Staff accepts responsibility for students' learning of the school's essential curricular goals.

Second generation. Responding to the demands of accountability by using what Covey (1989) referred to as beginning with the "end in mind," teachers are provided substantial professional development in order to create a learning atmosphere with a balance between higher level learning and the more basic skills that are prerequisite to their mastery, thus making a shift from simply teaching the content to making sure that learning occurs.

5. Opportunity to Learn and Student Time on Task

The first generation. In the effective school, teachers allocate a significant amount of classroom time to instruction in the essential skills. For a high

percentage of this time students are engaged in whole class or large group, teacher-directed, planned learning activities.

The second generation. Acknowledging that some students need more time to achieve mastery requires that (a) teachers become more skilled at interdisciplinary curriculum and the practice of “organized abandonment,” which allows for less important content to be abandoned in order to dedicate enough time to those areas that are valued the most and aligned with standards; and (b) the time that students spend in school be used efficiently and even be increased for those requiring more time to master the curriculum.

6. Frequent Monitoring of Student Progress

First generation. In the effective school, student academic progress is measured frequently through a variety of assessment procedures. The results of these assessments are used to improve individual student performance and the instructional program.

The second generation. Technology provides fast and accurate data that allow teachers and students to monitor and, where necessary, to adjust their behaviors. The standards-based alignment of curriculum with what is taught and what is tested provides a more accurate method of monitoring student progress, using criterion-referenced measures of student mastery rather than norm-referenced measures intended to rank and to sort students.

7. Home–School Relations

The first generation. In the effective school, parents understand and support the school’s basic mission and are given the opportunity to play an important role in helping the school to achieve this mission.

The second generation. Although parents may be as perplexed as teachers about the best way to inspire students to learn, an authentic partnership between the school and home that is built upon trust and open communication is the most effective way to strive toward achieving the school’s mission of “learning for all” (Lezotte, 1991).

Total Quality Management in Education

Total quality management is a philosophy of management that is driven by the constant attainment of customer satisfaction through the continuous improvement of all organizational processes (Robbins, 2000). The total quality management model originated from American consultant William Edwards Deming, who in 1947 assisted the Japanese Union of Scientists and Engineers to develop quality control methods that revitalized the Japanese industry (Walton, 1990). By 1950, this model was adopted and quality became a way of life and the focus for everyone in Japan (Deming, 1986). However, it was not until the early 1980s that U.S. companies such as Ford, General Motors, Dow Chemical, and Dell

Computers recognized Deming for his work and began using the Deming paradigm and the *Fourteen Points Theory of Management Transformation* (see Appendix A) for conceptual change (Schargel, 1996).

Total quality management has brought about improvement and has been implemented into major business organizations since the 1980s; it has now become of major interest to leaders in the field of education (Crawford & Shutler, 1999). One of the main thrusts of total quality management is meeting customer requirements and needs (Scrabec, 2000). The term *customer* in educational venues is expanded beyond the traditional definition of those who interact with the organization's products or services internally or externally to incorporate all the stakeholders within the educational setting, including administrators, teachers, support staff, operational staff, students, parents/guardians, and community members (Bonstingl, 1996). In both business and education, total quality management seeks incremental improvements and relies on the bottom-up participative decision-making of all stakeholders (customers) in the planning and execution of a total quality management program (Robbins, 2000). An application of this incremental improvement processes regarding the planning and execution of Deming's 14 points to education is found on Appendix B.

In the process of transforming organizations into total quality learning organizations, leaders have found it helpful to use total quality management tools and techniques to better perceive, collect, analyze, and understand relevant data

(Schargel, 1994). Sashkin and Kiser (1993) cautioned that the tools are not total quality management; they simply are graphic devices that organize concepts and allow for information to be synthesized. While various total quality management tools and techniques designed for improving worker performance and production output such as brainstorming, nominal group techniques, benchmarking, customer/supplier surveys and questionnaires, and other methods of handling and analyzing data are helpful in the quality journey, the planning and problem-solving tools and techniques most commonly used are the “seven traditional tools,” as they are known by practitioners of total quality management (Bonstingl, 1996). A depiction and brief description of each is found in Appendix C. With training, workers can be empowered to manage their work processes by keeping control charts of their own work and monitoring the quality of the items they sent down the production line. Thus, the quality of their output can be improved while curtailing the costly and ineffective end-of-line inspection process (Bonstingl, 1996). This process of using quality tools and techniques has significant implications for education. A key task of the contemporary school is to stay ahead of change, and without strategic planning, schools will be primarily involved in crisis management (Van der Linde, 2001). Quality planning is essential to the implementation of quality due to unprecedented pressure on teaching institutions as a result of new technology, changes in teaching methods, accountability, and limited resources. According to Erasmus and Van der Westhuizen (1996), local

and international competition has put too much pressure on organizations in general. Thus, strategic thinking is a way of continuously keeping the organization on course by making adjustments as internal and external contexts change (Weindling, 1997).

Focused Equity Practices

Focused equity practices emerged from a 2000 study by Scheurich, Skrla, and Johnson of system-wide achievement in four multicultural Texas school districts. These practices acted as the catalysts for inculcating equity beliefs into the daily operations of the schools and classrooms (Scheurich et al., 2000a). Equity, which is not synonymous with equal, is defined for the purposes of this study as the means that guarantees all students, regardless of socioeconomic status, race, gender, ethnicity, culture, sexual preference, and/or disability, equal opportunity and access to all aspects of the education system. Likewise, equity beliefs, as established by Scheurich et al., consist of truly believing that (a) all children, regardless of their racial and socioeconomic status differences, have the capability to learn and to succeed at equally high academic levels; (b) it is the responsibility of all of the adults in the district to insure that all of the children succeed academically; and (c) equitable and excellent classroom learning is the primary focus of district operations. Beliefs in educational equity must be acted upon to render “everyday equity,” the phenomenon Scheurich et al. (2000a?b?)

characterized as changing the beliefs and practices of the educators by gravitating toward the pursuit of equity and excellence on a daily basis. Scheurich et al. (2000a) described the interrelated and mutually reinforcing practices of focused equity operations as follows:

1. *Generating, directing, and maintaining focus* – By creating a clear sense of direction and focus that revolves around improved academic achievement for all, students, parents, district employees, and board members are able to understand and collaboratively support a district’s mission.
2. *Developing and aligning curriculum and delivering instruction* – Based on the state standards, Texas Essential Knowledge and Skills (TEKS), the development of vertical curriculum alignment of grades Pre-K–12 that are linked with appropriate instructional strategies and assessments provides teachers with focused, coherent, and functional practices for the delivery of instruction within the curriculum.
3. *Building and supporting capacity in people to contribute and to lead* – Building capacity refers to professional development for the teachers and administrators in order to develop the knowledge, skills, and attitudes necessary to improve instruction for all groups of students.
4. *Acquiring, allocating, and aligning fiscal, human, and material resources* – Principals and school decision-making committees are trained and expected to use their decision-making authority involving resources in

ways that are clearly focused on supporting equity and improving learning for all the students in the district.

5. *Collecting, interpreting, and using data and monitoring results* – In order to effectively drive improvement efforts, student performance data is used to focus, plan, and monitor the implementation of reform initiatives and teaching plans.
6. *Supervising, evaluating, and holding people accountable* – State and local accountability standards are used as the baseline for which everyone involved in the instructional program are held accountable. Performance evaluations, salary increases, bonuses, and employment are based on student performance and the willingness of individuals to pursue excellence and equity in teaching and learning.
7. *Refocusing energies, refining efforts, and ensuring continuous performance* – With the goal of improving student performance, instructional programs are evaluated in terms of each program's contribution to improved student performance. Despite past investments of time, resources, and training, ineffective programs are abandoned.
8. *Creating and nurturing alliances* – Alliances with businesses, community groups and organization, government agencies, and other educational organizations broaden the districts' abilities to encourage and to support improved classroom instruction.

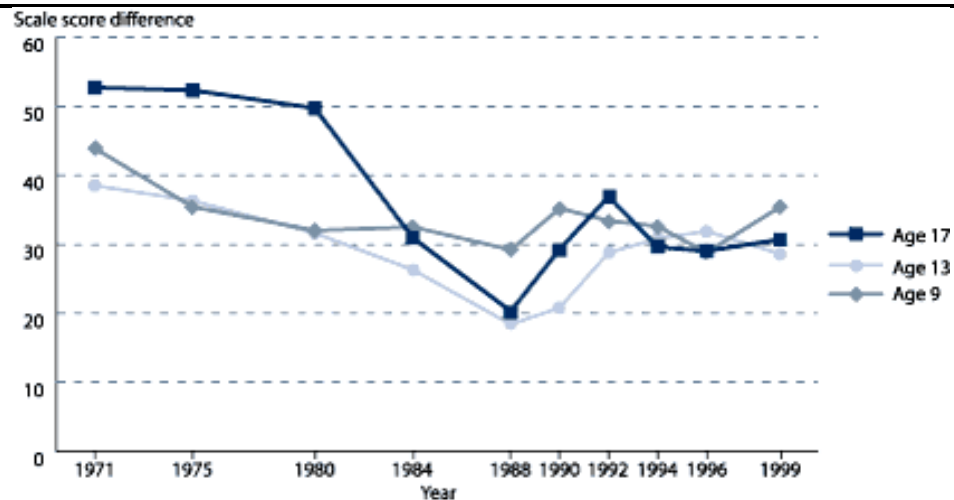
The Requisite for More Research

Research on high-achieving school districts is less abundant than studies of high-achieving schools (Cawelti & Protheroe, 2001; Fullan, 1999; Scheurich et al., 2000a). Thus, various researchers have contended that there are insufficient data regarding district-wide reform practices or academic equity that would eliminate the achievement differences common between African American, Hispanic, and White children (Fuller, 2001; Jacobson et al., 2002; Ream, 2001; Skrla, 2001; Scheurich et al, 2000b). Jencks and Phillips (1998) reasoned that because researchers have devoted far less attention to the achievement gap between student groups over the past quarter-century than the political and social consequences have warranted, there is no detailed “blueprint” for reducing the Black-White or Hispanic-White test score gap. This vast disparity of opportunity for African American and Hispanic students relative to White students implies that policymakers and school personnel should advocate actively political models and research models targeted to remedy these disparities (Raudenbush & Kasim, 1998). Likewise, Ferguson, (2001) called on researchers to conduct studies that allow for increased understanding of longitudinal patterns of achievement among children of different family backgrounds and explanations of how those patterns relate to various school and family factors that special interventions could target. It is evident that more research-based school reform strategies are needed for

educators to emulate potential models for closing the achievement gap. However, in a country as racially polarized as the United States, no single change taken in isolation could possibly eliminate the entire historical legacy of slavery and Jim Crow or usher in an era of full racial equality (Jencks, 1998).

Trends in the Achievement Gap in Reading Between White and Black Students

READING ACHIEVEMENT GAP: Difference in average reading scale scores of 9-, 13- and 17-year-old White and Black students: 1971–1999



Source: U.S. Department of Education, NCES. National Assessment of Educational Progress (NAEP), 1999 Long-Term Trend Assessment, and *NAEP 1999 Trends in Academic Progress: Three Decades of Student Performance* (NCES 2000–469), 2000.

Figure 1. Trends in the achievement gap in reading.

Chapter 3: Methodology

Chapter 3 describes the research methodology and procedures that were used in this qualitative study of how one Texas school district completely eliminated the achievement gap among all student groups. Research design, instrumentation and data collection, and data analysis and reporting are included in the description of the methodology. In a research paradigm, methodology “refers to the process, principles, and procedures by which we approach problems and seek answers” (Bogdan & Taylor, 1975, p.1). Furthermore, educational and social science literature has offered several paradigms for conducting research. Each paradigm has its own set of ontological (the nature of reality), epistemological (the knower-known relationship), and methodological assumptions that reflect the theories and practices of research design and implementation and define the nature and direction of any research endeavor (Jansen & Peshkin, 1992).

Rationale for Method

This study utilized qualitative research methodologies to examine the “settings and the individuals within those settings holistically, understanding that the subject of the study is not reduced to an isolated variable or to any hypothesis, but is viewed instead as part of a whole” (Bogdan & Taylor, 1975, p. 4). Qualitative methodology involves collecting, organizing, and analyzing text or

other information that is usually nonnumerical (Patton, 1980). Additionally, qualitative research information usually consists of “detailed descriptions of situations, events, people, interactions, and observed behavior” (Patton, 1980, p. 22). This method of research allows the researcher to study issues in greater depth and detail and is best suited for obtaining information about small numbers of people or cases in order to arrive at a clearer, deeper understanding of the phenomenon (Patton, 1990). Thus, in this study the researcher served as the primary research instrument (Ely, Vinz, Anzul, & Downing, 1997).

According to Yin (1989), a case study is preferred when the researcher’s goal is to examine thoroughly contemporary events and when the relevant behaviors cannot be manipulated. Thus, the researcher chose a single case study focusing on one Texas public school district. The distinctive need for case studies, according to Yin (1989), “arises out of the desire to understand complex social phenomena” (p. 14). As the primary research instrument, the researcher attempted to analyze the variables relevant to the subject under study (Polit & Hunger, 1983), focusing attention on one Texas school district rather than all Texas school districts. As a result, this case study does not focus on generalizations but rather on understanding the particulars of the school district. In order to understand the social culture of the district, the researcher obtained information regarding the values, relationships, and types of actions taken by each district staff member in his or her respective position. Thus, the design of this study included

semistructured interviews with individuals who participated in the change process under study. A set of open-ended, semistructured interview questions guided the framework of the dialogue during the discussions. Hence, because of the nature of this case study and the research inquiry, which required the examination of individuals' practices regarding organizational learning, effective school practices, quality, and equity, qualitative methodology was determined to be the appropriate research method.

Purpose of the Study

While acknowledging that most district reform attempts have failed, the purpose of this study was to understand in depth how one Texas school district has been consistently successful in reforming the education system for all student groups and, thus, has eliminated the achievement gap. Further rationale for the study involved the necessity to identify district-wide systemic reform measures used by practitioners that have successfully reversed social patterns that use power to enforce social inequity. This was accomplished by identifying the district-level cross-functional (interconnected) and operational (isolated) processes of an education system that has effectively eliminated the achievement gap between African American, Hispanic, and White students. More specifically, the study identified the district practices that affect one or more departments, areas, or functions in the school district. The late W. Edwards Deming asserted,

Schools should be a place where students, teachers, administrators, and others are able to take pride and joy in their work. It is the responsibility of administrators—the top management of schools—to remove the barriers that prevent this from being the daily experience of students and teachers. (as quoted in Bonstingl, 1996, p. 19)

Naturalistic Inquiry

The research paradigm referred to as “naturalistic” is ideographic in that the purpose is to document intensely one particular case so readers potentially may transfer and apply the findings into their own culture (Erlandson, Harris, Skipper, & Allen, 1993). Naturalistic evaluators reject the idea that social reality is reducible in the same manner as is physical reality; therefore, methods used to study social reality must differ. The goal in the naturalistic paradigm is to “understand” rather than to “know” (Denzin & Lincoln, 2002). The decision to use the naturalistic paradigm in this study was made based upon the naturalistic assumptions and the compatibility of the process to the goals of this research.

According to Lincoln and Guba (1985), naturalistic inquiry derives from five characteristics, or axioms. First, realities are multiple, constructed, and holistic. Second, the knower and known are inseparable and interactive. Third, only time- and context-bound working hypothesis (idiographic statements) are possible. Fourth, all entities are in a state of mutual simultaneous shaping, so it is impossible to distinguish causes from effects. Finally, inquiry is value bound (p. 37). Defined as an in-depth and timely focus on a group of people interacting with

each other, with their tools, and with the environment (Hall, 1998), naturalistic inquiry allows the researcher to observe and to explore human behavior and then to weave a narrative that accurately and honestly reflects the lives and voices of a group of people (Spradley, 1978). Through thick description (Geertz, 1973), the researcher attempted to uncover meaning and provide sufficient descriptive data.

Implications for Research

The intended implication for this research was to contribute to the knowledge about district-wide elimination of the achievement gap among student groups for the continual development and improvement of systemic educational practices. Lincoln and Guba (1985) proposed the utilization of the following research components, which are known to precede the five axioms listed previously, and which stem from the naturalistic inquiry approach: natural setting, human instrument, purposive sampling, inductive data analysis, emergent design, negotiated outcomes, case study, and idiographic interpretation.

Natural Setting

Observing the subjects in their natural setting allows the researcher to understand inductively and holistically the experiences of the subjects within their

context-specific settings (Patton, 1990). Lincoln and Guba (1985) contended that the phenomena of study take their meaning as much from their contexts as they do from themselves. Thus, the methods of inquiry were interpretive and relied primarily on participant observation, field notes, and interviews as the goal was to capture and to understand the stakeholders' perspectives from their vantage points, in terms of incentives and constraints. According to Marshall and Rossman (1989), "One cannot understand human behavior without understanding the framework within which subjects interpret their thoughts, feelings, and actions" (p. 49).

Human Instrument

The role of a human as a research instrument is that of participant observer, which facilitates the study of "real-world situations as they unfold naturally; non-manipulative, unobtrusive, and non-controlling; [with an] openness to whatever emerges" (Patton, 1990, p. 4). In addition, Filstead (1970) stated that this qualitative approach allows the researcher to be close to the data, thus consuming and experiencing the richness of the data. Of great significance, however, is the universally recognized notion that validity and reliability are the underpinnings for good research. Hence, the challenge of the human instrument in conducting fieldwork requires a balance of skill, competence, and rigor with flexibility, insight, and tacit knowledge (Lincoln & Guba, 1985). It is, nevertheless, inherent in all human beings to bring a unique set of experiences, beliefs, attitudes, and

values into one's construct of reality in such a way that undoubtedly will influence the researcher's perceptions of human development, organizational behavior, change, and communication while in the role of participant observer.

Purposive Sampling

Purposive sampling maximizes the researcher's ability to obtain accurate information concerning the studied phenomenon because it involves choosing to interview and to observe individuals who have the experience of the phenomenon as well as the capability to communicate their experience of that phenomenon. The intent of the researcher was to gather information regarding systemic reform efforts that have resulted in the elimination of the achievement gap among student groups from a number of individuals until redundancy and saturation of information was attained (Lincoln & Guba, 1985).

Inductive Data Analysis

Inductive data analysis was employed throughout the study to logically scrutinize field data. This strategy involved scanning data for categories and relationships among those categories. Boyatzis (1998) defined categories as patterns in the data that may be a description of observable information or interpretations of underlying phenomena. According to Bogdan and Biklen (1982), "Analytic induction is employed when some specific problem, question, or issue

becomes the focus of research. Data is collected and analyzed to develop a descriptive model that encompasses all cases of the phenomena” (p. 66). Initial analysis focused on the selection of key participants of the study, and as information was obtained through observations and interviews, it was analyzed, allowing patterns to emerge from the data.

Emergent Design

The emergent design refers to evolving decisions during the research process of what information to look for next and where to gather it. The purposive sampling is a reflection of the emergent design and guides the following step of data collection in the iterative process. The process stops when saturation is reached for those concepts and categories considered relevant in describing the phenomenon. According to Lincoln and Guba (1985), the design of the study should emerge while conducting the research. Lincoln and Guba gave four reasons why this is the case: (a) Meaning is determined by context, (b) multiple realities prohibit the development of a theory from being made only on the reality of the researcher, (c) that which is learned through the study depends on interactions between the researcher and the context involved, and (d) the nature of mutual shapings cannot be known until they are witnessed (p. 208). For this reason, the researcher approached the study with the possibility that the design could change as the research was being conducted.

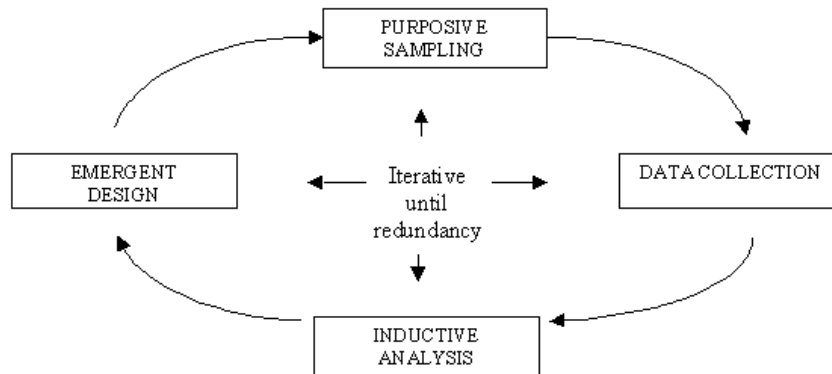


Figure 2. The emergent design process. Adapted from Lincoln and Guba (1985, p. 188).

Negotiated Outcomes

Throughout the inquiry, the researcher conferred with the respondents regarding the data, emergent themes, and interpretations so as to negotiate any differences between the researcher's perception and the respondent's intended meaning. For instance, in an effort to substantiate and to establish credibility in the subjectivity inherent in qualitative research, areas of the research such as observations, interviews, and conclusions were submitted to all participants involved in the study to ensure that all information gathered was not only recorded, but also recorded accurately. As Lincoln and Guba stated, "If we believe

that inquiry is value-bound, the values of the respondent must be considered” (1985, p. 212).

Case Study

Bromley (1990) defined a case study as a “systematic inquiry into an event or a set of related events which aims to describe and explain the phenomenon of interest” (p. 302). Similarly, Yin (1989) wrote that a case study is an “empirical inquiry that investigates a contemporary phenomenon within its real life context; when the boundaries between phenomenon and context are not clearly evident; and in which multiple sources are used” (p. 23). Various contemporary reports in psychology (Bromley), sociology (Creswell, 1997; Yin, 1984, 1994), and education (Stake, 1978, 1995) have studied the individual as the unit of analysis, and have used the case study method to develop rich and comprehensive understandings about people (Zucker, 2001). Lincoln and Guba (1985) asserted that the case study “serves three main purposes: thick description, axiomatic representation, and vicarious reader experience” (p. 215). Additionally, Lincoln and Guba (1985) suggested that case study is the best form for evaluations because it provides thick description, is grounded, is holistic and lifelike, simplifies data to be considered by the reader, illuminates meanings, and can communicate tacit knowledge (as cited by Merriam, 1998). According to Creswell, “A case study involves the widest array of data collection as the researcher attempts to build an

in-depth picture of the case.” (p. 123). The data collected in this case study included documents, interviews, direct observation, and participant observation (Yin, 1989).

Idiographic Interpretation

The naturalistic inquirer depends on idiographic interpretation “because different interpretations are likely to be meaningful for different realities” and because the validity of interpretations is reliant on contextual factors such as the “particular investigator-respondent interaction” (Lincoln & Guba, 1985, p. 42). Idiographic interpretation focuses on the individual case rather than generalizations (Lincoln & Guba, 1985). The findings derived as a result of this study may or may not be considered applicable to similar situations and organizations. Likewise, Lincoln and Guba (1985) contended that “what is found in some particular context has meaning only in the idiographic sense for that context at that time” (p. 216).

Trustworthiness and Validity

Trustworthiness and validity of the case study were established by testing for credibility, transferability, dependability, and confirmability (Lincoln & Guba, 1985, 1994). Credibility refers to the questions posed and how the responses match reality. Transferability addresses the extent to which the findings can be applied to

other situations. Dependability refers to the extent that the phenomena could be replicated under similar contexts. Finally, confirmability is related to the degree to which a researcher remains unbiased (Merriam, 1998). Additionally, trustworthiness in a qualitative inquiry depends upon the skills, competence, and rigor of the person doing the fieldwork.

Credibility. In an attempt to strengthen the credibility of the interpretations produced through naturalistic inquiry, Lincoln and Guba (1994) recommended the following:

It is believed that the probability that findings will be found to be more credible if the inquirer is able to demonstrate a prolonged period of engagement, to provide evidence of persistent observation, and to triangulate, by using different sources, different methods, and sometimes multiple investigators, the data that are collected (p. 307).

Thus, the strategies that were utilized in this study included prolonged engagement, persistent observation, triangulations, and member checks.

Prolonged engagement is the investment of sufficient time to achieve certain purposes such as learning the culture, testing for misinformation introduced by distortions either of the self or of the respondents, and building trust (Hernandez, 2001). Through extended visits in the district over the course of a semester, the researcher became involved with faculty, staff, parents, and community members throughout the district.

Persistent observation enabled the researcher to recognize and to assess prominent aspects and events that appeared to be nonconforming. Copious observations of district events, including classroom visits, attending campus- and district-level meetings, and acting as a participant observer at campus and district functions, allowed the research to discern questionable behaviors.

Triangulation is a basic component of ethnographic research that relies on multiple sources of evidence to help establish the confirmability of research findings. According to Fetterman (1998), triangulation “is at the heart of ethnographic validity, testing one source of information against the other to strip away alternative explanations and prove a hypothesis” (p. 495). Triangulation also reduces the risk of systematic distortions that often result when only one method of analysis is utilized (Maxwell, 1996). Furthermore, triangulation helps to strengthen certain assertions when multiple sources of data coincide (Denzin, 1978). Three modes of triangulation that were utilized in this study were sources, methods, and theories. Sources include interview respondents or different sources of equivalent information. Methods include such things as interviews and observations. Theories are explanations that are applied to explicate the nature of a phenomenon. Recurring patterns in the data were obtained from different people at different times through different means and thus enhanced the credibility of the findings.

Member checking is a process through which respondents verify data and the interpretations thereof (Lincoln & Guba, 1985). The data gathered for this

study were verified through testing data, analytic categories, interpretations, and conclusions with members of those stakeholder groups from whom data was collected. This process afforded the respondent the opportunity to correct erroneous information and to dispute possible incongruence. “It provides an opportunity to summarize—the first step along the way to data analysis” (p. 314), and provides the respondent an opportunity to give an assessment of overall adequacy (Lincoln & Guba, 1985).

Transferability. Naturalistic inquiry depends on a presentation of “solid descriptive data,” or “thick description” (Patton, 1990) to improve an analysis’s transferability. Thick description of the experiences and identity development of the participants; their environments, opinions, and perspectives; as well as the definitive exposition of the researcher is provided. Such detailed description provides the information necessary for the reader to decide if the conclusions of the study are transferable to a particular group (Lincoln & Guba, 1985). While the researcher speculated on the likely applicability of findings to other similar situations, readers must make their own decisions as to the application of the findings to their particular situations.

Dependability. Dependability is defined as the extent to which, if the inquiry “were replicated with the same or similar respondents (subjects) in the

same (or similar) context, its findings would be repeated” (Erlandson et al., 1993, p. 33). Understanding that subjectivity is an invariable aspect of social research (Peshkin, 1988), and acknowledging Stake’s (1981) contention that research should rely more on participant observation and introspection in its method, the reliability and dependability of qualitative research are subject to questioning by researchers from the positivist paradigm. In order to address this concern, Lincoln and Guba (1985) suggested, among other things, the use of dependability audits. Dependability audits involve the construction and maintenance of an archive facilitating access to all documentation as well as a running account of the process of inquiry in the form of researcher logs. An auditor examined the process by which the various stages of this study, including analytic techniques, was conducted and determined that this process was applicable to the research and was applied consistently (Lincoln & Guba, 1985).

Confirmability. Confirmability of an inquiry is defined as “the degree to which its findings are the product of the focus of its inquiry and not of the biases of the researcher” (Erlandson et al., 1993, p. 34). Confirmability is achieved when constructions, assertions, and facts can be tracked to their original sources and when the logic behind their construction leads to an explicit and implicitly coherent and corroborating whole (Twining, 1999). This process involves a confirmability audit, which allows external reviewers to judge the conclusions,

interpretations, and recommendations of the inquiry (Lincoln & Guba, 1985). The data, findings, and interpretations of the study were examined and served as the primary focus of this audit. Halpern (1983) provided six standard categories on which an audit should rely: raw data (field notes, documents and records), data reduction and analysis products (summaries, hypotheses, and concepts), data reconstruction and synthesis products (themes, definitions, findings and conclusions, and a final report), process notes (methodology notes such as procedures and designs and trustworthiness notes which relate to credibility), materials relating to intentions and dispositions (inquiry proposal, personal notes, and expectations), and instrument development information (observations and surveys) (as cited by Lincoln & Guba, 1985).

Research Design

The purpose of this study was to identify the district-wide systemic reform measures that have been used to reverse social patterns that use power to enforce social inequity, resulting in the eradication of the achievement gap common between African American, Hispanic, and White students.

Research Site Selection

The unit of analysis for this study was the district. Because of the limited number of districts that have been successful at eliminating the achievement gap

between all children; the constraints of geography; and the desire to obtain in-depth, detailed information regarding a district that has never before been studied, one Texas school district was chosen for this case study. The process of purposeful sampling (Patton, 1980, p. 101) was used to identify school districts based on the following criteria:

1. *Exemplary* rating, as measured by the TEA AEIS;
2. A large 4A or 5A district composed of 6,000 or more students;
3. Approximately 50% of the student population composed of minority children;
4. A minimum of 25% of the student population composed of economically disadvantaged children; and
5. The complete elimination of any achievement gap between student groups.

With these criteria guiding the selection process, the *Exemplary* district that was chosen was classified as 4A and consisted of 6,344 students, 46% of whom identified their ethnicity as either African American or Hispanic and 41% of whom qualified as economically disadvantaged and were eligible to receive federal assistance. Furthermore, according to the TEA AEIS, there was only a difference of 4 points in the TAAS passing percentage rate of the sum of test-taking students in grades 3–8 and grade 10. Twenty-three indicators denoted less than a 1-point difference between minority and White student scores. Upon selection of the district, the researcher was granted approval by the district and thus the

opportunity to reflect on and to assess the progress the district has made since the inception of district-level reform efforts in 1994.

Sample

Purposeful sampling was utilized to select a cross-section of district leaders to be interviewed based upon the leadership role of individuals, their knowledge of the critical district-level cross-functional and operational processes of the system and how they were introduced and implemented, as well as the individual's access to information. Those interviewed included the superintendent of the district, executive directors, department directors, selected principals, selected teachers, and selected community members. According to Bogdan and Biklen (1982), this method of purposeful sampling is used for analytic induction and involves choosing particular subjects to be included because they are believed to facilitate the expansion of the research.

Timing of the Study

Data collection occurred over the course of the fall semester of 2002. The researcher conducted interviews in the fall semester and attended district functions over the 5-month period of investigation.

Instrumentation and Data Collection

Instrumentation

Lincoln and Guba (1985) identified the characteristics that make humans the “instrument of choice” for naturalistic inquiry. Humans are responsive to environmental cues and able to interact with the situation; they have the ability to collect information at multiple levels simultaneously; they are able to perceive situations holistically; they are able to process data as soon as they become available; they can provide immediate feedback and request verification of data; and they can explore atypical or unexpected responses. Regarded as the most significant instrument in qualitative research, the individual researcher became the vehicle through which data was collected and interpreted in this study (Lincoln & Guba, 1985). Being well versed in the characteristics of the naturalist paradigm as well as possessing the appropriate level of skill to conduct such research are part of what Glaser and Strauss (1967) and Strauss and Corbin (1990) called the “theoretical sensitivity” of the researcher. Characteristics of theoretical sensitivity include the awareness of subtleties embedded in the meaning of data, insight, the capacity to understand, and the capability to separate pertinent and irrelevant data (Strauss & Corbin, p. 42). From the standpoint that individuals have the capacity to develop theoretical sensitivity, Strauss and Corbin suggested that this can be

achieved through professional literature and both professional and personal experiences. Of utmost importance is that the credibility of qualitative research relies heavily on the confidence readers have in the researcher's ability to be sensitive to the data and to make appropriate decisions in the field (Eisner, 1991; Patton, 1990).

Data Collection

Merriam (1998) advised that triangulation of data sources, collection, and analysis can help to assure that findings are accurate. Thus, following naturalistic inquiry, data collection for this study involved what Hoepfl (1997) contended to be the two prevailing forms of data collection associated with qualitative inquiry: interviews and observation. The combination of individual interviews, taking field notes during observations, and securing documents and records achieved triangulation.

Interviews. As Yin (1989) suggested, interviews are the most important method of data collection in qualitative approaches. According to Bogdan and Biklen (1982), "the interview is used to gather descriptive data in the subject's own words so that the researcher can develop insights on how subjects interpret some piece to the world" (p. 98). Qualitative interviews may be used as the primary strategy for data collection or in conjunction with observation, document analysis, or other techniques (Bogdan & Biklen). Open-ended interviews,

according to Patton (1990), permit the interviewer to understand the world as seen by the respondents. In addition to the standard, open-ended interviews, Patton (1990) described two other types of qualitative interviewing: (a) informal, conversational interviews; and (b) semistructured interviews. For this study, the researcher prepared an interview framework with a list of questions and general topics that were explored during each interview. The framework was prepared in order to guide the interview and to insure that basically the same information was obtained from each person. However, the researcher was not expecting predetermined responses. Furthermore, the semistructured interviews gave the researcher liberty to probe and to explore within the predetermined inquiry areas. The interview framework ensured time efficiency, and adherence to the predetermined inquiry. It also allowed for systematic comprehensive coverage of the inquiry area, while permitting the researcher flexibility to modify the focus or to exclude questions the researcher found to be unproductive for the goals of the research (Lofland & Lofland, 1984). In regard to recording interview data, Patton (1990) has said that a tape recorder is “indispensable” (p. 348). Thus, in order to capture the data accurately, the researcher recorded the interviews with cassette tapes and recorders for immediate transcription and interpretation.

Observation. According to Lincoln and Guba (1985), observation is the most sophisticated instrumentation for collecting and interpreting situations where

motives, attitudes, beliefs, and values direct most of the human activity.

Observation can lead to deeper understanding than interviews alone, because it provides knowledge of the context in which events occur and may enable the researcher to see things that participants themselves are not aware of, or that they are unwilling to discuss (Patton, 1990). The researcher assumed the role of participant observer. Denzin (1989) defined participant observation as a research “strategy that simultaneously combines document analysis, interviewing of respondents and informants, direct participation and observation, and introspection” (p. 158). As a participant observer, the researcher immersed herself, to the extent possible, in the community in order to understand and to document the dimensions of the district, including the setting, activities, participants, and interactions of these variables, monitoring verbal and nonverbal cues as well as concrete, unambiguous, and descriptive language.

Patton (1980) identified six benefits from direct observation by a researcher:

1. It offers a contextual frame.
2. It lets the researcher be open in approach.
3. It allows the researcher to observe things that might escape the awareness of more distant researchers.
4. The researcher can learn things that participants may be unwilling to discuss overtly.

5. The researcher can go further than selective perceptions of others.

6. The experiences help the researcher to understand and interpret data.

Recorded data took the form of field notes, which were running descriptions of settings, people, activities, and sounds. Acknowledging the difficulty of writing extensive field notes during an observation, Lofland and Lofland (1984) recommended jotting down notes that serve as a memory aid when full field notes are constructed. This should happen as soon after observation as possible, preferably the same day.

Documents and records. Lincoln and Guba (1985) defined documents as any written material that was not prepared specifically in response to a request from an inquirer. Documents are valuable not only for the information they can provide, but also because they can direct the evaluator's attention during further data collection. Documents analyzed in this study included TEA AEIS, meeting notes and agendas, copies of teaching materials, e-mail, Internet sources, and newspaper articles that involved the district.

Data Analysis Procedures and Reporting

Data Analysis

A “necessary consequence” of the phenomenological paradigm is grounded theory (Lincoln & Guba, 1985, p. 205), or theory in which “categories [are] readily (not forcibly) applicable to and indicated by the data under study” (Glaser and Strauss, 1967, p. 3). Bogdan and Biklen (1982) concurred that:

Data analysis is the process of systematically searching and arranging the interview transcripts, field notes, and other materials that you accumulate to increase your own understanding of them and to enable you to present what you have discovered to others (p. 145).

The analysis of the data collected in this study resulted in (a) a single case study of a district that has successfully closed the achievement gap among student groups, (b) a description of how the district-level processes were implemented and functioned to improve student achievement, and (c) a model of district-level reform strategies that may be applicable to similar districts.

Coding the Data

McCracken (1988) advocated a stage-based coding approach, in which the objective of the analysis and coding “is to determine the categories, relationships, and assumptions that inform the respondent’s view of the world in general and the topic in particular” (p. 42). This study employed a simplified three-stage model. In the first stage, based on what Strauss and Corbin (1990) called “open coding,”

transcripts and other documents were examined line –by line and assigned labels and categories, “giving each discrete incident, idea, or event, a name, something that stands for or represents a phenomenon” (Strauss & Corbin, 1990, p. 63). These tentative codes were reviewed using the “constant comparative method” (Glaser & Strauss 1967, p. 101–116, cited in Strauss & Corbin, p. 62). Codes that appeared to relate to the same phenomenon were grouped into categories. Names for codes and categories came from three sources: (a) the review of the literature (some of which is documented in chapter 2); (b) phrases used by the research participants themselves, in which case they are known as “in vivo” codes (Strauss & Corbin, p. 69); and, finally, (c) the investigator. In the next stage, similar to Strauss and Corbin’s “axial coding,” the codes and categories were compared and checked against one another, this time searching for connections between categories with a view to detecting emergent themes. The alternate use of open and axial coding occurred simultaneously throughout the analysis process. A third and final stage, based on the “selective coding” of Strauss & Corbin, aimed to remove categories that did not bear significantly on the research of the study.

The coding process as a whole was guided by the desire to gather the knowledge and understanding of how the district was successful in closing the achievement gap between student groups. Various broad descriptions of code types assisted the analysis process by drawing attention to the most pertinent data:

1. Codes about operational practices

2. Codes about the rationale for implementation
3. Codes about how implementation occurred
4. Codes about quality management
5. Codes about pride or efficacy
6. Codes about support
7. Codes about equity
8. Codes about accountability
9. Codes about educational implications
10. Codes about measurement of progress
11. Codes about roles and responsibilities

These codes provided a framework for analysis.

Field Notes

Field notes differ from other data sources in that they rely heavily upon investigator recollection to capture data. Observations of district operations at the central office, campuses, and individual classrooms provided anecdotal records that were documented along with recorded notes that were taken after formal and informal interviews.

Limitations of the Methodology

The methodology was limited to a small number of informants within the district chosen for interviewing. Additionally, the study was a single case study and cannot be generalized to other school districts. A further limitations was that the investigator, serving as the primary research instrument, gathered all findings.

Summary

This chapter described the prominent characteristics and procedures evident in qualitative, or naturalistic, research (see, for example, Bogdan & Biklen, 1982; Eisner, 1991; Lincoln & Guba, 1985; and Patton, 1990). Qualitative research was utilized in this study to understand the events carried out by a district in order to successfully eliminate the achievement gap between all student groups. Resulting in a case study, the methods and strategies employed included using the natural setting as the source of data, acting as the human instrument of data collection, using inductive data analysis, using thick description, discovering the meaning events have for the individuals who experience them, seeking the uniqueness of each case, allowing the research to emerge, and incorporating strategies to ensure trustworthiness. Patton (1990) pointed out that these are not “absolute characteristics of qualitative inquiry, but rather strategic ideals that provide a direction and a framework for developing specific designs and concrete

data collection tactics” (p. 59). These characteristics are considered to be “interconnected” (Patton, 1990, p. 40) and “mutually reinforcing” (Lincoln & Guba, 1985, p. 39).

The research site was chosen based upon its *Exemplary* rating, as measured by the TEA AEIS and the fact that the district was populated with more than 6,000 students, of whom approximately 50 % were African American and Hispanic children and at least 25% were economically disadvantaged. This qualitative study made use of in-depth, open-ended interviews, direct observations, and written documents. Respondents included district and campus administrators, teachers, and community members. The results of the study are discussed in chapter 4.

Chapter 4: Timeline of Events

1988–1989

The reform movement in Woodard ISD was set into motion soon after Dr. Jones was named the new superintendent for the 1988–1989 school year. Coming from Louisiana, Dr. Jones was very familiar with the academic as well as social discrimination of people of color and the economically disadvantaged. Confronting these issues head on, the superintendent was intent on reversing the social patterns that resulted in low student achievement by creating safe learning environments, acquiring effective campus and central office leaders, and increasing participation in school activities.

1989–1990

At the same time, changes in Texas law required the implementation of a new criterion-referenced test, the TAAS. This test would replace the Texas Educational Assessment of Minimum Skills (TEAMS) and thus shift focus from minimum skills to academic skills, representing a more comprehensive assessment of the state-mandated curriculum, the Essential Elements. Because the TAAS assessed a broader range of the Essential Elements; was more difficult than TEAMS; and would provide scores and consequences at the student, school, and

district levels, the Texas state board of education set a one-year interim standard for satisfactory performance beginning in the 1990–1991 school year.

1990–1991

In 1990, the TEA conducted a cycle District Effectiveness and Compliance (DEC) visit in the district. The DEC team from TEA cited the district for student safety concerns, student/teacher ratios, and student performance—all of which Dr. Jones already knew to be of concern. The report’s publication in the local newspaper and presentation to the local school board assisted the district in passing a \$20 million bond election that would directly address these concerns.

1991–1992

The first substantial change in leadership occurred in the 1991–1992 school year, when Dr. Lynn Lewis was brought in to replace the former assistant superintendent. With the top administrative team now focusing on the same goals and objectives, the reform movement picked up momentum. The school board approved plans for the construction of new schools and major repairs and expansions to existing schools, thus addressing the safety and student/teacher ratio concerns.

1992–1993

With the matter of student safety and student/teacher ratios rescinded, central office's next priority became student achievement. Though ratings from TEA would not be awarded until the following school year, central office had grave concerns regarding the differences in achievement between African American, Hispanic, and White students. Principals were directed to identify and to implement programs, incentives, or activities designed to improve student achievement.

1993–1994

The final stage of construction was completed as the new middle school opened in the 1993–1994 school year, relieving overcrowding problems and further reducing student/teacher ratios. Although quite costly and controversial, the district implemented block scheduling at both middle schools. This decision was based on research, which indicated that significant amounts of time were one of the most important leveraging variables in terms of closing the achievement gap. The 1993–1994 school year was an historic turning point for all schools in Texas, as this was the year the legislature enacted the creation of a new statewide integrated accountability system that included the rating of campuses and districts. The inclusion of TAAS in the accountability system, the public release of

performance results, and the exit-level requirement for graduation made TAAS the most high-stakes assessment in Texas history. The district earned an Acceptable rating from TEA for the 1993–1994 school year; yet, for most stakeholders, this rating was not acceptable because of profound achievement differences between African American, Hispanic, and White students.

1994–1995

The second substantial change in leadership occurred in the 1994–1995 school year. Through retirements and individuals' moving to other districts, the administration was able to place strong instructional leaders at every campus. At the central office, two major changes occurred. First, the secondary curriculum director was replaced. Second, the Curriculum Team was created, which included the superintendent, assistant superintendent, elementary and secondary curriculum directors, director of academic services, director of special education, and the personnel director. The Curriculum Team would prove to be one of the most pivotal forces that would move the district forward in its reform effort. The first resolution coming from the Curriculum Team was the request to abandon the local school board's 53 goals and set one primary goal: student learning. The second resolution was to meet with principals and the district advisory council twice a month, limiting administrative jargon and framing all discussions under the auspice of student learning. The resolution that, at that time, seemed most

provocative to administrators and teachers was the Curriculum Team's requirement for the District Improvement Plan and all Campus Improvement Plans to set incremental goals, which would lead to earning TEA *Exemplary* status within 5 years. To ensure buy-in and to communicate the importance of and the district's commitment to eliminating the achievement gap, campus principals included every faculty member in creating the campus plans. By writing these goals, which stated that 90% of all African American, Hispanic, White, and economically disadvantaged students would pass the TAAS, teachers were forced to confront their prejudices and fundamental belief systems regarding the achievement of students of color and poor students. In some instances, this revealed deficit thinking (Valencia, 1997), views that attribute low student achievement to cognitive and cultural inferiority. This activity authoritatively communicated to the district and to the community the Curriculum Team's compelling belief that all students could learn and that the success of every student regardless of race or social status was nonnegotiable.

Though the district earned an *Acceptable* rating from TEA, there were discernible improvements. For instance, Southside Elementary became the first school in Woodard to become TEA *Recognized*. More importantly, however, the new detailed reports provided by TEA enabled principals to trace student achievement to individual teachers, ascertaining effective and ineffective teaching

practices. This allowed principals to make changes, to provide extra support, and to better monitor student progress.

1995–1996

The most striking reform changes occurred during the 1995–1996 school year. One change was the director of special education moving to the position of elementary curriculum director, thus making the Curriculum Team even more cohesive. Another change, almost unheard of at the high school level, was the implementation of block scheduling. Although block scheduling was exceptionally costly in comparison to traditional scheduling, the success at the middle school level warranted the implementation at the high school level. The most remarkable change, however, occurred in the area of curriculum. Grade-level and subject-area teachers were asked to devise a TAAS calendar, which included a sequential timeline of when all TAAS objectives would be taught and when mastery of those objectives would be tested through benchmark assessments. These assessments, written by Woodard ISD teachers, were standardized across the district in each grade level and subject area. Although these appraisals would eventually be revised to reflect the actual context of test, the first assessments tested single TAAS objectives in isolation. The teachers were asked to record and to report to the Curriculum Team students' scores disaggregated by race and socioeconomic

status. This was asked as a way of making teachers cognizant of African American, Hispanic, and low socioeconomic students' scores.

However, the single act that functioned as the most powerful catalyst for ensuring student learning was the collective dissemination of the benchmark results to all of the teachers who gave the same assessment. This public display of results had a profound effect on the teachers' behavior. While sharing personal results served to inform the teachers of where their students stood in comparison to other teachers' students, this means of reporting results led to intense competition and pride. Teachers began allocating more time to the instruction of TAAS objectives, abandoning less important content, as well as using time at school more efficiently. A language arts portfolio was implemented to record individual reading and writing objective assessments and TAAS writing samples. Data became very important as teachers became more focused on ensuring that all students achieved.

While the dissemination of individual teachers' results acted as a powerful catalyst for improvement across the district, when Woodard Middle School East missed earning *Recognized* status due to one student, the entire faculty became even more focused on student learning. Because of the teachers' hard work and strong desire to achieve an *Exemplary* rating, the majority of teachers did not question the administration's decision to reorganize teachers or the nonrenewal of ineffective teachers' contracts.

The district focus on student learning was becoming more apparent: Once again, Southside Elementary and Rancho Elementary, both populated primarily by middle-income White children, earned a *Recognized* rating from TEA. The most compelling evidence, however, that the district was proceeding on course was Westside Elementary's earning *Recognized* status. This school, led by a African American, female, first-year principal, was the first Title I campus in Woodard to prove that all students, regardless of race or socioeconomic position, could learn and could demonstrate that learning on the TAAS.

1996–1997

Several changes in middle management and curriculum were implemented during the 1996–1997 school year. Four lead teachers specializing in mathematics, language arts, science, and social studies were pulled from the classroom half of the school day in order to research the effectiveness of existing and prospective programs, to revise the scope and sequence for each grade level and subject area, and to revise grade-level and subject-area benchmark assessments. The next level of middle management was the coordination of the curriculum advisory council, whose task was to disseminate information, vertically align curriculum, and edit benchmark assessments. The four half-day assignments and the advisory council were both extraordinarily cost effective and beneficial to students in that the teachers maintained their teaching assignments.

The curriculum changes initiated by the lead teachers began with the creation of a strong curriculum foundation in the primary grades. Everyday Mathematics, a comprehensive pre-kindergarten through sixth grade mathematics curriculum developed by the University of Chicago School Mathematics Project, was piloted at Frontier Elementary and implemented district wide the following year. This program, which emphasized the application of mathematics to real-world situations, was quite different from traditional mathematics programs and was not aligned with the TAAS. Though many teachers were alarmed by this, the lead mathematics teacher and elementary curriculum director insisted that this type of program was essential in the formative years for laying the curriculum foundation that would be needed at the secondary level. To manage data and to better identify students' strengths and weaknesses, math portfolios were implemented that maintained the results of TAAS math objective benchmark assessments.

Further changes in the curriculum were made in the area of reading. Taking an eclectic approach, the district adopted programs that addressed both phonics and whole language. Open Court Reading, which provided a balance of literature while focusing on alphabetic and phonological awareness, was implemented at all of the elementary campuses. Open Court was used in the middle school resource classrooms as a means of moving middle school students reading below grade level to grade level. In addition to Open Court, Reading Renaissance was

implemented at all campuses in the district. Components of this program provided students with extended periods of time for sustained reading of texts appropriate for students' individual reading levels. Extensive training and support was provided for the effective implementation of both programs.

Utilizing the knowledge and skills of effectual teachers and researching and refining the curriculum facilitated the district's receiving in 1996–1997 a *Recognized* rating for the first time. In addition, Southside Elementary was the first campus to earn an *Exemplary* rating, and for the second consecutive year Rancho and Westside Elementary were *Recognized*. While the district as a whole celebrated the accomplishment of earning the *Recognized* rating, the faculty at Woodard Middle School East's efforts to attain *Recognized* status were thwarted, falling short once again by only one student. This shortfall for the second time reemphasized the importance that every student and teacher must be held accountable for learning. It was in this ambiance that the district once again reorganized teachers, this time placing proven, effective teachers with struggling students and placing less effective teachers with more capable students. Likewise, the administration reorganized in many other ways as well. Administrators provided teachers with more support in terms of discipline, training, and scheduling, and would now be more visible as a means of deterring discipline problems. Additionally, all content area teachers would now be expected

incorporate TAAS into their subjects, and all students would be assigned to teams of teachers so that student progress could be better monitored.

1997–1998

In the fall of 1997, TEA forwarded a draft of the new state curriculum, the Texas Essential Knowledge and Skills (TEKS), to all Texas school districts. Woodard immediately abandoned the Essential Elements, the former state curriculum, and began aligning the district's curriculum with the TEKS. During this phase of alignment, the lead teachers and curriculum advisory council used district inservice days and release days to create a scope and sequence and aligned benchmark assessments for each grade level and subject area organized in 6-week increments. These documents, which were subject to revision, presented the TEKS objectives, possible methods of presenting a correlated lesson, and noted if the TEKS was to be tested on TAAS. With the intention of perpetuating the continuous improvement of the testable curriculum, the lead teachers and curriculum advisory teachers were provided release days periodically throughout the school year to revise the scope and sequence and the benchmark assessments based on student achievement and teacher input.

These benchmark assessments provided valuable data to teachers and administrators by identifying students who had not demonstrated mastery of all the testable TEKS objectives; as a result, various initiatives to improve student

learning were put in place at many campuses. For instance, Dr. Jones strongly encouraged every employee to become a mentor for at least one student. Choosing students who had previously failed the TAAS, Dr. Jones provided more than encouragement to them; in his role as mentor, he made these students believe in themselves and prepared them with the internal and external skills needed to master a high-stakes assessment such as the TAAS. Another example of mentoring beyond merely tutoring a student was the assistant superintendent's relationship with various students. Dr. Lewis acted as a parent for some students, in one instance actually bringing a child into her home, enrolling that student in college, and providing ongoing support and assistance. In fact, there were numerous philanthropic examples of teachers and administrators giving their time, financial assistance, trust, and devotion to Woodard students. This enthusiasm, dedication, and commitment to the education and well-being of all Woodard students may have been the dynamic that united the district and thus transformed self-interest into a shared vision.

This model of servant leadership manifested at the central office filtered down to campus administrators and teachers, as evidenced by these individuals offering tutorials before and after school and even on Saturdays. The joint efforts of all the stakeholders resulted in the district earning, for the second year in a row, a *Recognized* rating from TEA. Also receiving a *Recognized* rating were Southside Elementary and Westside Elementary, and after 2 years of barely missing the

mark, AMS [NOTE: ?? Woodard Middle School East?]East received a *Recognized* rating as well. The most incredible improvements, however, were seen in both Northside Elementary and Frontier Elementary earning an *Exemplary* rating. The incredible aspect regarding these schools is not the fact that they went from an *Acceptable* rating to an *Exemplary* rating, but rather that almost half of the students enrolled in each of these two schools were of low socioeconomic status, receiving free or reduced-price breakfasts and lunches.

With every campus in Woodard ISD earning a *Recognized* or *Exemplary* rating except AMS [?? Woodard Middle School?]West and the high school, the administrators at each of these campuses felt external and intrinsic motivation to move their campus to the next level. Due to several math and language arts teachers retiring at the end of the 1997–1998 school year, numerous changes at these campuses were made regarding the adherence to the district’s scope and sequence and assessment plan.

1998–1999

One change for every campus was the final version of the TEKS becoming effective in all content areas on September 1, 1998. The impact of this state legislation prompted the district to increase their efforts to further develop the instructional guides; to better monitor, evaluate, and revise the scope and sequences; and to develop quality standardized grade-level assessments. With this

objective in mind, several teachers attended the TEKS Team Institute at the Charles A. Dana Center, seeking research-based practices intended to improve student learning.

Other curriculum projects included evaluating and revising novel units, as well as integrating science and social studies with CIMMS software. In addition, the two middle schools and high school began implementing flexible scheduling for students needing remediation. In essence, students would be periodically pulled from elective classes, and teachers would use half of their 90-minute planning time to work with students individually or in small groups. Consequently, the district curriculum that began with various commercial programs was modified to meet the needs of the students and the teachers to the extent that none of the original programs were being implemented in their purest form, yet the district was being successful. For example, the high school earned a *Recognized* rating for the first time in the 1998–1999 school year, and AMS [Woodard Middle School?]East and AMS [Woodard Middle School?]West earned an *Exemplary* rating. Finally, realizing their goal one year ahead of schedule, the district earned an *Exemplary* rating.

1999–2000

Not wanting to rest on their laurels, district leaders identified five major curriculum projects to address during the 1999–2000 school year: the district scope

and sequences, the approved reading list, differentiated curriculum for gifted and talented, TAAS activities, and professional development. The major changes included dismantling the lead teacher positions professional development, and a reduction in the number of assessments—opting for assessments that were more reflective of the actual TAAS.

With the groundwork for the curriculum in place, when various lead teachers retired, their positions were not filled. The administration sought to include every teacher in the improvement process. Therefore, teachers in each department or grade level were given one release day each semester to review student data and to revise the scope and sequence determining what skills to teach, when to teach the skills, how long to spend on each skill, and what resources were available to use. In addition, teachers revised the assessment calendar and the cumulative assessments.

The change in professional development incorporated a monthly professional development calendar and a needs assessment to determine summer staff development. The district looked at the cost of sending teachers to various training seminars versus bringing in the actual trainers. Finding it more cost effective to bring in consultants, the district hired consultants such as Jane Shafer, Michael Eaton, Grace Stassney, Harry Wong, and Ruby Payne to provide training for the entire district.

Due to the extraordinary district improvements and effective leadership, Dr. Jones was named the Texas Classroom Teachers Association's Administrator of the Year in the central office category. Other accolades included the high school earning an *Exemplary* rating along with the district and five other campuses.

2000–2001

In the 2000–2001 school year, the elementary and secondary curriculum directors attended a Texas Association of School Administrators workshop regarding Fenwick English's curriculum audit. From this training, the curriculum directors saw a need to refine the curriculum and to change the format of the scope and sequence, making it more compact and accessible. The method of negotiating the format changes would ultimately prove to be a lengthy process.

Earning an *Exemplary* rating yet another year, many of the district's practices, albeit modified over time, were basically the same. One area of concern, however, was the need to provide training for new teachers. This training, dispersed throughout the year, helped new teachers learn the culture of high expectations in the district and understand the district's curriculum documents.

2001–2002

With student success high and the achievement gap eliminated, a range of TAAS activities underwent conciliation. Each grade level or department developed

a different instructional and assessment calendar based not only on the logical sequence of instruction, but also on individual campus schedules. Likewise, the types of assessments were altered to acclimate 6-week exam and semester exam requirements. Because teachers of the various grade levels and subject areas could not come to a consensus regarding a standardized format that would make the scope and sequence more compact and accessible, each grade level and subject area chose a format that best suited its needs and preferences. While the complete scope and sequence was still a valued document, a one-page course outline was added, providing the teacher with a condensed overview of the year. This increased autonomy extended to various realms of pedagogy under the premise that high student achievement be maintained.

The district earned an *Exemplary* rating for the 4th year in a row. With the goals of the district realized, it was necessary to prepare for the new state assessment, the Texas Assessment of Knowledge and Skills (TAKS), which would be administered in the 2002–2003 school year. This test would be more rigorous, include all of the testable TEKS, and require higher-level critical thinking.

Considering the teachers as expert, the administration provided release days for identifying testable TEKS and developing assessment questions. Having eliminated the achievement gap, a task very few districts have managed to do, Woodard ISD remained dedicated to continuous improvement and committed to

reversing social patterns that result in the low achievement of students of color and the economically disadvantaged.

Chapter 5: Study Findings

*Slave Master Elias Horry, “Tell me, are you guilty?
For I cannot believe unless you tell me so—what were your
intentions?”*

*John Horry defiantly responded, “To kill you, rip
open your belly, and throw your guts in your face.”*

Though society has changed since the abolition of slavery, one should not underestimate the amount of pent-up anger currently percolating within the African American psyche (Robertson, 1999).

Many people have pondered over the specific reasons that lead black men to so often throw down a vicious slam dunk when a mere soft lay up would do. They then run back down the court shouting out angrily toward real and perceived adversaries. It might be that they view themselves as giving a forceful retort to the doubters and detractors, those who don’t know who they really are. At least the basketball player has a legitimate outlet for his muscular tension and crisis of being and identity, most Black males live with a certain degree of anxiety and pent-up aggression—the stuff of frustration or of the stillborn hopes, aspirations, and potential (Booker, 2000).

The pent-up aggression, frustration, and loss of faith common among people of color are played out in our public schools under the ruse of low academic achievement. The disparity in the nation’s education system has manifested in fewer than 30% of African American boys graduating from high school with their peers in many of the largest cities (Jones, 2002). Likewise, an African American boy born in 1991 stands a 29% chance of being imprisoned at some point in his life, compared with a 16% chance for a Hispanic boy, and a 4%

chance for a White boy (Report on Incarcerated Youth, 2000). A study published by Building Blocks for Youth (Poe-Yamagata & Jones, 2000) noted that on every indicator of social well-being, Whites were better off than African Americans, Hispanics, Asians, or other minorities. The causes of this disproportionate underachievement are attributable to a large degree to the social and economic conditions these youth face and to racism and its vestiges, such as segregation in housing, education, and employment (Poe-Yamagata & Jones). Believing that education is an equalizer, countless educators and policymakers have striven, all too often to no avail, to overturn such discriminatory social and economic conditions. Yet, the only true measure of success in the quest for academic excellence is to guarantee that high-quality education is standard for all children, including those who are least advantaged children—those most impoverished, those suffering the effects of a history of discrimination, those least likely to graduate from high school, and those most likely to be placed in special education programs (Jones, 2002).

Exemplified by the complete elimination of the achievement gap between African Americans, Hispanics, and Whites, Woodard ISD. has not only guaranteed, but also delivered a high-quality education for all students, especially the least advantaged. In attempting to discover how this phenomenon occurred, especially in light of the fact that an infinitesimal number of other school districts have had comparable accomplishments, five suppositions emerged:

1. The Texas Accountability System acted as the key infrastructure of the district transformation.
2. District leaders possessed a strong desire to remedy academic discrimination.
3. All stakeholders maintained a sustained focus on student learning.
4. The conditions in the district were conducive to reciprocal support.
5. Student, teacher, and district efficacy exuded the learning environment.

The Texas Accountability System Acted as the Key Infrastructure of the District Transformation

In 1993 the Texas Legislature mandated the Texas Accountability System, currently used by the TEA to evaluate the performance of public school districts and campuses through ratings, acknowledgments, rewards, sanctions, and reports. This system was designed to work in conjunction with the pre-existing Public Education Information Management System (PEIMS), the standard statewide data collection system, which encompassed all public data requested and received by TEA. The PEIMS required school districts to report information including organization data; budget data; actual financial data; staff data; student demographic, program participation, and prior year school-leaver data; and student attendance, course completion, and discipline data. While the PEIMS was the avenue used by the TEA to report education accountability, the accountability

system itself also consisted of a criterion-referenced assessment system that tested students' knowledge of the state curriculum. Additionally, the district and campus accountability ratings; the district and campus recognition for high performance and significant increase in performance; the sanctions for poor performance; and the school-, district-, and state-level reports were all integrated to comprise the Texas Accountability System.

A middle school principal described the implementation of the Texas Accountability System:

I know that testing is always a nuisance. It's a pain, it's costly, and you can go on and on and name reasons why it's a problem, the time it takes, etc. But there has to be an accountability standard. That's what assures everybody regardless of where they're from, their race, where their parents were born, this or that, it ensures that they are going to be given that opportunity, and to me it's a positive step forward, especially the alignment of the test and the curriculum. I think if we were to cut back on that it would hurt our kids by not preparing them for college, and not preparing them to be competitive in our national and global market. I think we're on the right track in continuously raising those levels of expectations of what we need to do, because once we achieve where we are, we need to raise the bar.

Over the course of the Texas reform movement, "raising the bar" was precisely what the state did. Set by the Commissioner of Education within the parameters specified in the statute, the standards for each accountability rating as well as the expectations for acceptable performance were designed to phase in increasingly higher expectations for districts and campuses. Each year the system has been made more rigorous by increasing TAAS passing rate standards for reading, mathematics, and writing performance and by requiring lower dropout

rates. Predominantly created to improve student performance, the system philosophy recognizes diversity and allows for flexibility in the design of programs to meet the individual needs of students. This places the responsibility for ensuring the high student achievement of all students, regardless of race or economic status, with the local school districts and consequently renders appropriate consequences for noncompliance.

Also integral to the Texas Accountability System was the implementation of the state-designed teacher and principal evaluation program, called the Professional Development Appraisal System (PDAS). This appraisal system evaluated teachers and principals on a broad range of domains, one of which included student performance. Test scores, dropout rate, attendance, and annual learning gains were among the various appraisal indicators.

An additional component of the Texas Accountability System was the public's right to know levels of disaggregated student performance in each school district and on each campus. The TEA utilized an extensive and broad range of data collected through the PEIMS, the various testing contractors who provide scores on standardized tests administered statewide (e.g., TAAS, SAT, ACT, AP, IB, and TASP) as well as the other state agencies that provide information such as tax rates and property values. In order to identify and to eliminate achievement differences, all of this data was integrated in the AEIS, which annually reports different performance indicators (see Appendix D) disaggregated by ethnicity,

special education, and low-income status, along with information on school and district staff, finances, programs, and demographics. Prior to the 1990–1991 school year, this type of information was not made available to the schools. One teacher talked about her first realization that an achievement gap did indeed exist.

When we saw the students' scores separated by race and socioeconomic status, it was a huge wake-up call. All the kids were doing well in your classroom, and then they take a test, and we found out that some weren't as successful as others. You go, "oh my gosh, what are we doing wrong?"

In an effort to make the Woodard teachers and principals cognizant of the achievement gaps made known through the state's accountability system, the teachers were instructed to give individual TAAS objective assessments and to disaggregate and to report their students' scores by race and economic status. The elementary curriculum director explained the process in this way:

We had the teachers reporting disaggregated data regarding race and socioeconomic status. Teachers would look at those scores and be astonished because they never realized there was so much of a difference. When they started filling out the one-page sheets regarding ethnicity and socioeconomic status, that made them more aware of who they needed to hone in on. A lot of time they would give a test, take the grade, and go on but not really pay attention to who is having problems.

Another teacher remembered the beginning of the change process in Woodard this way:

The thing that started the district to think about eliminating the achievement gap between Blacks, Hispanics, poor, and White children was probably when we started focusing on the scores themselves. We started looking at the different numbers and realizing that there was such a gap. At first we didn't pay attention to that, and then all of the sudden we started doing more assessments, and the assessments started drawing our attention to that.

Perhaps if critics of the Texas Accountability System, such as Haney and McNeil, clearly acknowledged the guiding principles of this integrated accountability system, it would become apparent that this system, for this first time in history, took the initial steps necessary for the realization of equity in education. It is quite clear that the Texas Accountability System's guiding principles of improved student performance, the recognition of diversity, and appropriate consequences makes the Texas Accountability System the most significant catalyst of education improvement in Texas.

District Leaders Possessed a Strong Desire to Remedy Academic Discrimination

Curriculum, the basis of schooling, is a prevailing device that ultimately can determine the impending social context for millions of children. All too often a child's destiny is determined well before leaving elementary school due to school officials placing students in remedial classes with no chance of getting on track. Ability tracking is a practice in which students are sorted into different instructional sequences, often resulting in inequitable educational opportunities and outcomes for students. The literature on ability tracking has indicated that perceptions of the relationship between ability and noncognitive attributes such as socioeconomic status and ethnicity continue to play a part in curriculum assignment (Lipman, 1998; Lucas, 1999; Oakes, 1990). The authority of school officials and policymakers to dismantle existing social structures hinges primarily

on the governance of the school in regard to reducing variation in student course selection to offset the discrimination that may be inherent in course differences.

Administrators in Woodard ISD recognized the overrepresentation of students of color in low-level classes and the implication that these students remaining in these classes resulted in academic discrimination and widening of the achievement gap between African American, Hispanic, and poor students and middle-income White students. Moreover, leaders in the district held the fundamental belief that achievement gaps existed because of past or even present discrimination of oppressed groups by the dominant society, and that every child should be held to the same standard regardless of race or economic status.

One middle school principal explained a controversial decision to reorganize teaching positions as an impetus for eliminating the differential effects of school context on curriculum by double blocking mathematics instruction, which would lead to phasing out lower-level mathematics classes, thus preparing all students for taking college preparatory classes at the high school level.

We had a woodshop teacher that moved. The Spanish teacher moved. There was one other. We said, “What do we really need to improve on at our campus?” At that time we had made some strides in reading, but math was still lagging. At that time I made the choice that, I can’t find these elective teachers, so if I were able to hire a couple of really good math teachers, we might be able to go to math everyday and pilot it in sixth grade. Well, we went and hired two good math teachers right away. We put that everyday program into sixth grade. When the scores came in our kids did tremendously.

This principal had an implicit understanding that mathematics instruction builds on earlier prerequisites and that students assigned to lower tracks in middle school have little opportunity to take higher level courses, especially in math and science, required for acceptance by most major universities. This belief was conveyed to the entire faculty at his campus as is evidenced by this sixth grade teacher:

Our goal actually as sixth-grade teachers was to prepare the students for algebra. The fifth- and sixth-grade teachers met to vertically align curriculum. Now we're going all the way down to fourth-grade teachers asking what's expected of their students in order to get these kids prepared for algebra.

Whether or not a student takes algebra in the eighth grade will determine whether he or she will qualify to study calculus in the 12th grade. The school district policies, curricula, and student academic development at all grade levels, but particularly grades 6–9, are critical for mathematics education (Gordon & Della Piana, 1999).

The process of remedying academic discrimination in Woodard ISD required more than curricular changes. Valencia (1997) described how the culture of poverty is absorbed by young minds, rendering them at the mercy of those who possess a deficit mode of thinking, which uses authority and power to keep the economically disadvantaged and people of color separate from the dominant society. Boykin (1994) posited that to provide a more effective school for all students, the basic cultural beliefs that maintain the existing school social order

must be transformed. In essence, the mindset and culture in the district needed to be altered to assume responsibility for the academic and social success of all students. One teacher explained, “No one expected them [students of color] to perform well—not the teachers, not the parents, and not even the students themselves.” The retort to this way of thinking came from the superintendent:

It doesn’t make any difference, Hispanic, Black, White these are kids. I don’t know how we’ve been looking at these kids in the past, but obviously by these scores, we’ve been looking at them differently. I don’t care how you do it, but it needs to change. Every student can learn in this district, and every student will be expected to learn.

Another teacher recalled,

We did a lot of things to change the sharecropper mentality held by some of our students. We made it clear that there was no reason for an achievement gap, and I think for the first time the minority students really started believing us. Before, they had been ignored, and society had sent a message to them that they were inferior to Whites.

This desire to remedy academic discrimination was echoed by a middle school principal:

There was that old attitude that the kids are here to learn from me, and if they don’t want to learn, that’s their loss. No, it’s not. It’s our loss, and so we really became more child centered. We changed our philosophy that you don’t just sit up there and talk, you get down on the level that you have to get to be successful. You change your teaching style. It was no longer the parents’ responsibility to make sure that that child was being successful. You are the parent at school, and you’ve got to be responsible for making that kid learn.

A raised level of consciousness expanded through the district as administrators, teachers, and students began confronting and dealing with deficit views of thinking. The basis of this paradigm shift involved respect, dignity,

building self-esteem, and expecting high achievement from all students. A teacher remembered the paradigm shift like this:

Before, we tried to hide the scores, and it felt racist just reporting the scores that showed Blacks and Hispanics performing much lower than Whites. Now we tell everyone that they need to be proud of their ethnic group. You see kids sit up a little taller in their seat when you say that, and especially when they hear the disaggregated scores, and how well the students from those particular groups performed. Once we starting addressing race and telling the students about the achievement gap, the students started taking more responsibility for their own learning.

A principal recollected,

You realize that all of our kids are equal; all of our kids have equal ability. If they're not equal it's because of their backgrounds that come in, and we can't hold that against them. And we can't allow them to use that as a crutch. I know we had made a conscious effort to build these kids up, to build all kids up, to make them realize number one what our expectations were. The expectations had to be high, and the learner had to be clear of what that was. We needed to let those kids know that we expected every one of them to accomplish that. A lot of confidence building; a lot of making kids feel good about themselves, raising self-esteem.

All Stakeholders Maintained a Sustained Focus on Student Learning

A sustained focus on student learning is essentially the assiduous ensuring that all students, especially the least advantaged students, learn and achieve at high levels. When Texas schools were provided student achievement data disaggregated by race and socioeconomic status, district leaders noticed the achievement gaps inherent in Woodard ISD. In an effort to remedy academic discrimination, the district abandoned all other goals except student learning for all. The new superintendent reflected,

At that time the board had 53 goals, and they consisted of just whatever anybody wanted to put out there. So we went back to the board and said, “Look, there’s only one goal that we’re here for, and that goal is *student learning*.” So we set student learning as our primary goal.

A clear school mission is one of Edmonds’ (1982) correlates of effective schools. In his view, effective schools clearly articulate the school’s mission, through which the staff shares an understanding of and commitment to instructional goals, priorities, assessment procedures, and accountability. Correspondingly, using the Texas Accountability System as the baseline for measuring success, the district set incremental goals to attain *Exemplary* status as recognized by TEA within 5 years. The new superintendent said,

We want to be *Exemplary*, but what’s realistic because we didn’t want to come in and say, “Next year we’re going to be *Exemplary*.” So, we made some incremental goals. When you’re at 40% passing, you have to double and then add a little bit more to get to the 90% passing rate. We didn’t want the teachers to think this was unrealistic and something that they could never achieve, so we set a 5-year plan to become *Exemplary*. We took where we were and divided it out by how much we needed to improve each year in each of the subpops to get there. It worked; we met it a year early.

The district goals were certainly achieved, but these goals were not achieved simply because they were set. Successful school improvement requires not only the establishment of a clear educational vision and a shared institutional mission, but also knowing how well the school is accomplishing that mission, identifying areas for improvement, developing plans to change educational activities and programs, and implementing those plans or new programs effectively (Lezotte & Pepperl, 1999). Thus, creating an effective learning

environment for all students entails an unswerving focus on supporting the systemic reform. In effect, everyone accepts responsibility for students' learning the school's essential curricular goals.

The Woodard ISD administration presented the goals to the district and collaborated with the teachers to develop work plans, practices, and procedures that would lead to the attainment of *Exemplary* status within 5 years. The curriculum department identified four exceptional teachers in each major content area and asked those teachers to assume the role of lead teachers. This included a half-day teaching assignment and a half-day curriculum position. The servant leadership of these teachers led to everyone in the district having the same shared vision of becoming *Exemplary*. "We became very, very focused on getting rid of all the gimmicks. We were going to get rid of anything that wasn't related to at that time the Essential Elements," remembered the new superintendent.

Total quality management literature has suggested that strong leadership, buy-in from all stakeholders, and a shared mission based on quality principles allows organizations to identify, analyze, and solve problems; to establish quality goals and objectives and to measure results; and to focus the strategic vision on the needs, requirements, and expectations of its customers (George & Weimerskirch, 1998; McCormick, 1993; Mears, 1995; Schargel, 1994). The teachers' buy-in was illustrated as follows:

They [the teachers] felt that the changes that we were making were the right changes, and there was a strong belief in what we were doing. I'm

convinced that it was from the classroom level that these major changes took place.

And in regard to the students, their buy-in to the district mission was depicted in this way:

Students take a lot of pride in their achievement. Before, it was secret little numbers and secret test items. The test wasn't their own; it was something the state mandated. Now the kids have the information presented to them, and they know what they need to learn within a year and that they have to work hard for that. We called this our TAAS talks. We sat down with them and looked at last year's scores and the benchmark scores and talk to parents. They even talk to each other and say, "Hey you don't want to make below an 80, or you'll have to get into a tutorial class." They have their own little drive also. Kids know now that in order to graduate they have to pass the TAAS or now the TAKS. When we get closer to the test, we do a self monitoring sheet, and they chart their own objectives and start noticing certain objectives that they keep missing and recognize what they know and don't know and how to correct errors. Before they just took this big test. They knew it was important, but they really didn't know what to do. They weren't familiar with the content or with the objectives, and now they know what's expected from them in relation to the state curriculum and the test.

One of Deming's 14 points is to create constancy of purpose for the improvement of products and services (Schargel, 1994). In terms of education, this constancy of purpose for the improvement of products and services (i.e., sustained focus on student learning), involves helping students to maximize their own potentials through continuous improvement of teachers' and students' work together (Bonstingl, 2001). For Woodard ISD, the progress inherent in the continuous learning process far outweighed test scores or accountability ratings. This exercise of self-reflection on the part of the administration and teachers was

necessary for effective changes to be made. One principal explained the process of self-reflection this way:

We had to start doing some curriculum work. And the curriculum work started with our teachers getting together, evaluating what they were teaching, evaluating what was important, evaluating where we were doing a poor job of teaching.

This process of setting criteria, implementing plans, assessing the implementation through hard data and self-reflection, and then using the data to plan again was echoed repeatedly by teachers and administrators in the district. Although neither the teachers nor the administrators mentioned the quality tool Plan, Do, Study, Act, it was apparent that the process of analyzing in order to improve processes was embedded within the district's operations.

Senge (2000) noted that the failure of an organization to sustain significant change lies not in the organization's lack of commitment to change, but in its inability to change its most basic ways of thinking. On the other hand, a prevailing change effort can be successful when everyone is effected and continues to remain committed, when "undiscussable" topics are brought out in the open, and when stakeholders look at the systemic causes of problems rather than just the symptoms (Senge, 2000). When the district's curriculum team faced resistance and initial setbacks in implementing the reform, they remained committed and focused on improving student performance. When "undiscussable" topics such as race, ethnicity, social class, and accountability were openly discussed, the stigma gradually diminished and real solutions could be addressed. And when the district

acknowledged that they played a significant role in maintaining the achievement gap, they were willing and able to remedy the academic discrimination. For all of these reasons, Woodard ISD's reform effort remained focused and ultimately eradicated the achievement gap between Blacks, Hispanics, poor, and White children.

The Conditions in the District were Conducive to Reciprocal Support

In many ways, the culture in Woodard ISD was one of reciprocal support, very similar to what Sergiovanni (1992) advocated as both professionalism and virtue in building school communities through moral leadership, which emphasizes services to others and making schools places of respect and devotion to doing the right things the right way. However, determining the “right thing” and the “right way” can be quite subjective and an issue of contention, as was the case at the beginning of the Woodard ISD reform movement. The secondary curriculum director explained, “It was a brand new start for everyone, not knowing where to start. Let's start somewhere.” Though the first year presented the curriculum team with initial setbacks in both form and functionality, they remained focused on the goal of improving student performance. Likewise, the principals and teachers withstood what was described as the illogicality of some of the initiatives, remaining committed to the same overarching goal.

The phenomenon that prevented this effort from being quelled during the first year of implementation was in essence the mutual trust between the teachers and administration. Senge (1999) contended that trust can only arise where people have deep, intense interest in each other. Understanding that trust grows in small incremental steps, the new superintendent discussed the trust in Woodard ISD in this way:

We've all been together probably longer than we want to admit. We're all in tune to each other and have been on the same page for a long time. There's just not a lot of mistrust because everybody is like an open book. That's the way it is on the campuses....I think that's what has made us strong.

An elementary teacher restated this sentiment, "There is a true sense of unity, and I feel it is reflected back onto the students."

The support evident in the district was unique to specific instances. For example, in order to ensure a quality education for all students, the teachers needed support from both the Curriculum Team and the campus administration. When professional development was needed, a number of well-regarded consultants were brought into the district. In addition, under the direction and supervision of the elementary and secondary curriculum directors, district teachers were provided the time and resources to align the district curriculum with the state curriculum and to develop district assessments that were aligned with the state assessment. The teachers then could use the data generated through these assessments to identify

students requiring additional and often differentiated instruction and thus provide additional support to the students. One teacher explained,

They [the administration] have been very, very supportive as far as allowing us to work with our scope and sequence, giving us the flexibility to finally figure out where we need to be at what point with the students as well as the TAKS and the TEKS. I think that that in itself has allowed us to be more creative in the classroom, to be able to meet the needs, as well as, the different styles of learning for all of our students.

English (2000) contended that tests primarily assess cultural differences, which is why socioeconomic level is so dominant as a predictor of pupil performance in most state tests. And because color is related to poverty, there is a potential to use tests to punish individuals because they are poor, African American, or Hispanic (English, 2000). Only when curriculum becomes focused on and connected to, as well as aligned with, tests will the influence of socioeconomic level on test performance decline (English, 2000). Because Texas has a state curriculum, the TEKS, Woodard ISD was able to “backload” the scope and sequence. In other words, the teachers developed TEKS-based documents for each department and/or grade level that outlined sequential teaching plans and objectives organized in 6-week increments. The implementation of these “effective school” procedures decreased the predictability of socioeconomic determinism from test performance (Lezotte & Pepperl, 1999).

The supportive culture exemplified in Woodard ISD also was reflected in the structure of the learning system, in which the elements of the system were

interconnected so each process affected other processes within the system

(Bonstingl, 2001). A principal related the interconnected system as follows:

I think it really came down to the philosophy that we're all in this together. We need to work together, we need to be a team; we need to be a family; we need to share; and we need to be innovative...A lot of team building and building confidence in one another, supporting one another, and that's important in getting ultimately to that team and family approach.

The central administration, which is extraordinary small in comparison to other similar districts, relied heavily on the committed followership of the staff.

Likewise, both the teachers and the administration relied on the principals to be the instructional leaders at the campuses and to provide a school environment that was conducive to learning for all.

One teacher commented,

The administration is very supportive, very supportive...They take the information and help us figure out who and what we need to target. By doing all this paper shuffling and constantly feeding us information [disaggregated data] it takes away some of our paperwork, so we can focus on what needs to be done in the classroom.

Through the close collaborative efforts of the administration and the teachers, time-consuming barriers were removed, thus increasing the capacity of the teachers to continuously improve their work.

The increased capacity of teachers involved a complex mix of internal drives, motivation, empowerment, and servant leadership grounded in the teachers' character, morals, values, and ethics. English (2000) understood that the isolated school structure allows teachers to make decisions that can void the best

developed curriculum plans by simply ignoring them; however, this was certainly not the case in Woodard ISD. In fact, it was universally acknowledged by the administration, teachers, students, and parents that the district changes came to fruition because of the classroom teachers. A principal remarked, “I think our whole movement was as effective as it was because of the people in the classroom.” Likewise, the new superintendent stated,

It was an effort from the board, through central, through the strong, strong principals, but it doesn’t matter what those three groups do, we have yet, any of us to teach a TAAS objective, it was the classroom teachers, and they were and are magnificent.

The concept of support, especially reciprocal support, is an abstract that proves difficult to define with text; yet, when an individual observes a supportive act, it is clearly recognizable. For example, many of the teachers in Woodard ISD relinquished part or all of their planning/conference period every day to provide additional instruction to students who had difficulty grasping particular lessons. This type of support that went above and beyond the employee’s contractual agreement with the district was evident from the Curriculum Team, campus administration, teachers, and parents. A teacher explained the district’s success, “I don’t know what it is, but I think the whole community has been involved in it.”

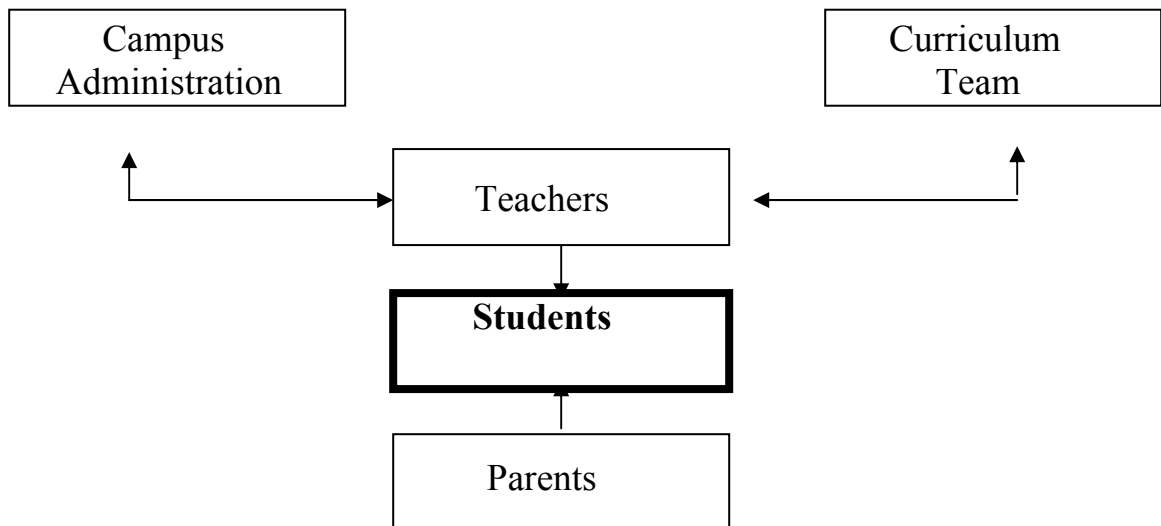


Figure 3. Reciprocal support illustration.

High Student and Teacher Efficacy

Because of the mutual support between all stakeholders, district, teacher, and student efficacy was possible and clearly evident in the internal motivation to achieve the desired goals. Lezotte and Pepperl (1999) stated that in effective schools there is not only a climate of high expectations for students, but also staff members who believe they have the capability to help all students attain that mastery. A middle school principal described the administration's belief and confidence in the campus administrators.

It was conveyed from the top, and as far as testing and success it was just put out there that “I expect you to be successful.” Basically that was their approach, and if you had questions or concerns, if you needed something, you contact them. Basically they said, “I’ve hired you to do a job; go and do it.” Might not be the same as everybody else, but you go and do it as you see how it needs to be done.

In addition to confidence, the district’s teachers had a high level of subject knowledge and specialized pedagogy. A math teacher illustrated this point:

The first question I ask my students when they walk into my classroom every year is, “Who likes math?” Of course not many hands are raised. That is my goal because they have to be successful. Not that it’s going to be their favorite subject at the end, but they have to be comfortable with it. I think if we all take that pride to make kids comfortable and successful, then they will like the subject. The kid’s not going to like the subject if he’s failing.

Similarly, the elementary curriculum director was impressed by both the teachers’ knowledge of the TEKS and the confidence they had in their students. She stated, “Whenever the teachers are planning the scope and sequences, it’s surprising how they’ll say, ‘The kids can do that,’ or ‘The kids can do more than that.’” This confidence was found not only at the classroom level, but also at the central office. The secondary curriculum director confirmed, “I’m secure enough in my general knowledge that I don’t mind being told I’m wrong in specific areas because they [the teachers] are the experts.”

Initial successes in the district set the benchmark for more successes. Through this success, students as well as teachers, began to develop personality constructs around the perception that in this district success was attainable and

even probable, regardless of race or socioeconomic status. A principal portrayed this student efficacy as follows:

Part of this is that you make kids feel pride in who they are. We did that. At the time we had several people saying, “I don’t think we should do this.” What they meant by that is that we started talking about race. We started talking about subpops. I had a couple of African American teachers saying, “I don’t think this is right.” I listened to them, but I didn’t believe them. The conviction that I felt at the time was that these kids need to know that. They need to know the standard that they were being held up against. Why should it be a secret to them. Ultimately it’s going to come out in the papers, and it’s going to come out in our reports. They earned the right to know about this. We were very cautious as to underscore it by letting them know, hey, not one person in this room is different, but our scores are coming back different. You have to help this to change. I think when we really started doing this, it really helped to raise the level of awareness, and it also raised the level of pride. And being up front with the kids can be a powerful thing if you use it in the right way.

The new superintendent framed it in this manner:

I think a lot of it has to do with making kids believe in themselves. It’s given the kids a sense of pride that Woodard is not only good, you are one of the best ones in the state because you are one of the largest school districts. You’ve got the most diverse student population, and you are good!

In the same way, a paraprofessional stated that the students “have this goal as well as we do. They feel a pride and a drive within themselves to do well, too.”

Not only did the students feel a sense of pride in their accomplishments, the teachers took pride in their work as well. An elementary teacher stated, “You want to be proud of the kids you’re sending on. You don’t want to send a kid who’s not prepared for the next grade.” Likewise, a high school teacher commented, “I think pride has a lot to do with it. We say all the time, ‘Oh my

gosh, we'll be crushed if one of our kids didn't pass. Everyone else's kids are going to pass.'"

The internal drive of the students and teachers acted as a strong catalyst for motivating others. A middle school teacher remarked, "We put a lot of it on ourselves. It's not so much the administrators. Whatever we did at the beginning, it's had an effect on the entire district. No one sits back and relaxes. It's a drive within us." A high school teacher reiterated, "I don't think there was more pressure from the administration than the pressure that the teachers put on themselves to make sure their students did well."

While efficacy is a supposition that evolves internally, the medium that first set this into motion was the district's dissemination of individual teachers' disaggregated results on district assessments. Although it was outwardly communicated that these results were used merely to identify students in need of remediation, the district-wide distribution of every teacher's assessment results acted as an external motivation to ensure the learning and high performance of all students. A middle school teacher described this experience, "I think that some of the things from the top helped us to take more pride like when the scores were printed on paper with our name attached to the student scores."

The new superintendent recognized the teachers' internal drive, as well as the external motivating factors of the state's accountability system, stating,

I think there's trust, and they're [the teachers] not stagnant because everyone's so competitive. It's, like, OK, here are the rules the state wants

to play by, here's the game, here's the score, here's how you get there. OK, we're not going to be satisfied being *Acceptable*; we're not going to be satisfied being *Recognized*. We won't be satisfied until we're *Exemplary*. Pride. The competitiveness kicks in, and people do what they have to do.

A high school teacher documented the implications of the accountability system:

We saw the scores from the state and said, "Oh, this can't continue to happen; there's no reason for this kind of gap." We expected students to perform in the classroom and how come they aren't doing well on the test? From that point we just started doing whatever it took to make sure that every student was successful.

As the district earned *Exemplary* status, more autonomy was given to the teachers. Having additional control over the method and sequence of delivering instruction allowed the teachers to expand their teaching capacity and to feel empowered. One teacher explained,

The curriculum directors have always said that the teachers are the experts and know what to do, so a lot of the decision-making as far as what to do to make sure every child achieves has been put back on the teachers.

The secondary curriculum director embellished,

They [the teachers] are on their own personal subject area timeline. They work on this within their own group. We've got the district timeline that says that by the end of the semester, we want you to be here. I pretty much leave up to them, but they are very regimented within that subject area. I think it's been important in the secondary level to allow the teachers to develop the tests and to determine when they are going to give them.

Empowering and building capacity in students, teachers, and the culture of the district resulted in what Bandura (1986) described as the belief in one's capabilities to organize and to execute the sources of action required to manage prospective situations. This kind of results-oriented method of systemic change in

Woodard ISD involved a culture of efficacy at three different levels—student efficacy, teacher efficacy, and district efficacy—that influenced the choices that were made, the effort put forth, and how long the students, teachers, and district persisted when confronted with obstacles (Pajares, 2003).

Conclusion

Authors such as Cuban and Tyack have avowed that American schools merely reflect the cultural, political, social, and economic conditions of the dominant society at large and that most reform efforts fail because reformers do not fully understand the mechanics of the system. Likewise, Kozol (year) contended in his book, *Savage Inequalities*, that fundamental inequalities are actually built into the system of public schools. Thus, if the successful restructuring of the school system most often fails to work with the nature of the school system, and if the nature of the school system itself acts to perpetuate social inequities, how has one Texas school district been successful in eradicating achievement differences between African American, Hispanics, the economically disadvantaged, and middle class White students? The most relevant factors appear to reflect a deep-rooted social concern for democracy, equity, or preparing students to lead fulfilling adult lives. This has been seen in the external catalyst for motivation from the Texas Accountability System; the desire to remedy academic discrimination; the sustained focus on student learning; the reciprocal support of

the administration, teachers, and students; and the culture of student, teacher, and district efficacy.

An interesting side note can explain how this change effort has persisted through the years. An intermediate math teacher stated,

When every teacher has a 95% plus passing rate, the numbers really don't motivate us anymore, but when a kid walks up to you and says, "I really like math now. I've never passed the TAAS before, but this year I did," that is what helps keep us motivated.

Woodard I.S.D. Education Reform Process

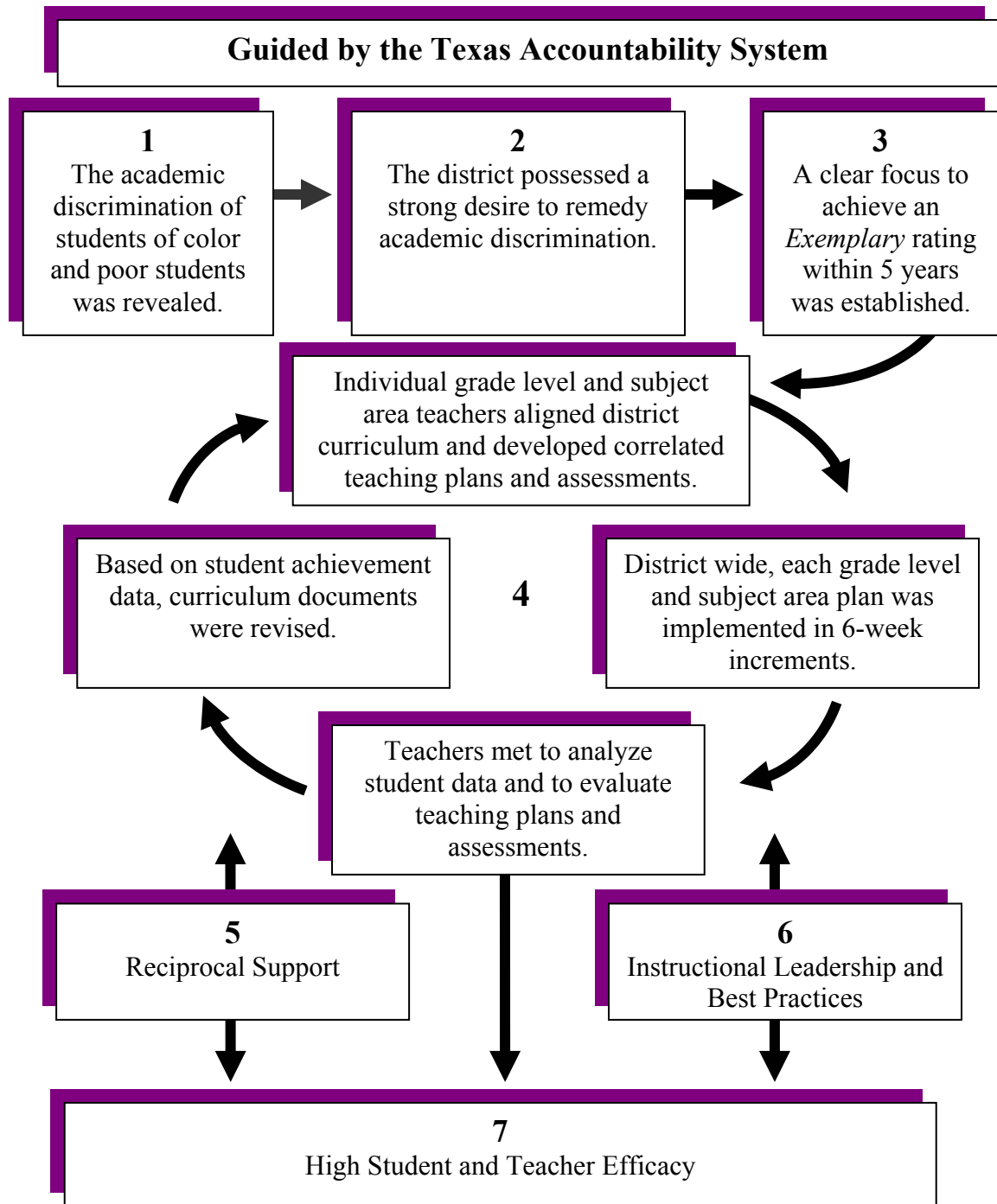


Figure 4. Woodard ISD education reform process.

Chapter 6: Theoretical Constructs

The findings derived from the in-depth examination of the Woodard ISD regarding the complete elimination of achievement differences between African American, Hispanic, economically disadvantaged, and White students include: (a) the Texas Accountability System acting as the key infrastructure of the district transformation; (b) the strong desire to remedy academic discrimination; (c) a sustained focus on student learning; (d) reciprocal support of all stakeholders; and (e) high student and teacher efficacy. In examining the district transformation, four theories were considered as possible rationalizations for the elimination of the achievement gap: organizational learning disciplines, correlates of effective schools, total quality management in education, and focused equity practices. This chapter analyzes each of the four theories in relation to the aforementioned findings, examining how the findings match and how they do not match the theories. The chapter closes with recommendations for further study.

Organized by themes, Tables 1–5 merge the theories with the study’s findings. Drawing various attributes from each of the four theories, a combination of theory components aligned with the study’s findings are offered as possible explanations for the district’s success in eliminating achievement differences.

Table 1. *The Texas Accountability System Acted as the Key Infrastructure of the District Transformation, Theoretical Construct*

Organizational learning disciplines	Correlates of effective schools	Total quality management in education	Focused equity practices
			Supervising, evaluating, and holding people accountable (State and local accountability standards used as baselines; evaluations, etc. based on student performance)

Table 2. *The Strong Desire to Remedy Academic Discrimination, Theoretical Construct*

Organizational learning disciplines	Correlates of effective schools	Total quality management in education	Focused equity practices
	Climate of high expectations for success (High expectations for success will be judged, not only by the initial staff beliefs and behaviors, but also by the organizations' response when some students do not learn; Learning for all)	Adopt a new philosophy (Continuous improvement through empowerment of teacher-student teams)	
		End the practice of doing business on price tag alone (Insure that quality is installed every step along the way, regardless of the price tag)	Acquiring, allocating, and aligning fiscal, human, and material resources (All decisions are focused on supporting equity and improving learning)

Table 3. *A Sustained Focus on Student Learning, Theoretical Construct*

Organizational learning disciplines	Correlates of effective schools	Total quality management in education	Focused equity practices
Personal mastery (Visualizing desired results and then comparing what is wanted to reality)	Frequent monitoring of student progress (Setting a criteria for desired results, measuring through assessments, using data to improve performance and the instructional program)	Cease dependence on mass inspection (Assessments should be given as diagnostic and prescriptive instruments to be used to plan for instruction not as punishment)	Collecting, interpreting, and using data and monitoring results (Student performance data is used to focus, plan, and monitor)
Mental models (Communicate inward perceptions in order to make changes)	Instructional leadership (Leader communicates mission)	Eliminate slogans that ask staff for new levels of productivity without providing new methods (“Quick fixes” are never encouraged as a substitute for quality staff development)	Refocusing energies, refining efforts, and ensuring continuous performance (Programs evaluated in terms of the contribution to improved student performance and are either kept, improved, or abandoned)

Organizational learning disciplines	Correlates of effective schools	Total quality management in education	Focused equity practices
Shared vision (Increases clarity and generates enthusiasm and commitment)	Clear and focused mission (Staff shares an understanding of and commitment to the instructional goals, priorities, assessment procedures, and accountability; substantial professional development, shift from simply teaching to ensuring learning)	Improve constantly and forever the system of production and service (Do not leave learning to chance) Create constancy of purpose for improvement of product and service (Continuous learning process)	Generating, directing and maintaining focus (Improved academic achievement for all)
	Opportunity to learn and student time on task (Significant and efficient use of time students are engaged in learning; assessments are used to improve performance and instructional program)	Take action to accomplish the transformation (Dedication to full implementation must be supported; uses tools to assess status)	

Table 4. *Reciprocal Support of All Stakeholders, Theoretical Construct*

Organizational learning disciplines	Correlates of effective schools	Total quality management in education	Focused equity practices
Team learning (Aligning capacities)	Instructional leadership (Capitalizes on distributed expertise)	Institute programs of training (Staff development) Institute a vigorous program of education and retraining (Maximize potentials through staff development and organizational development)	Building and supporting capacity in people to contribute and lead (Professional development for teachers and administrators to improve instruction)
Systems thinking (Examines interrelationships, uses tools)	Safe and orderly environment (School environment is conducive to learning for all, respecting human diversity and appreciating democratic values)	Break down barriers between staff area (Combine talents of departments to break down role and status barriers to productivity)	Developing and aligning curriculum and delivering instruction (Provide teachers with focused, coherent, and functional practices)

Organizational learning disciplines	Correlates of effective schools	Total quality management in education	Focused equity practices
	Home-school relations (Partnership built on trust and communication)	Institute leadership (Coach/mentor encourages front-line workers so that the organizational context can be maximized)	Creating and nurturing alliances (Alliances with business, community, etc. broaden district's ability to encourage and support instruction)
		Drive out fear (Shared power, responsibilities, and rewards)	

| Table 5. *Student and Teacher Efficacy, Theoretical Construct*

Organizational learning disciplines	Correlates of effective schools	Total quality management in education	Focused equity practices
	Climate of high expectations for success (Teacher efficacy; high expectations for themselves, students, the school district)	Remove barriers to pride and joy of workmanship (Remove systemic causes of teacher and student failure)	

Organizational Learning Disciplines

Learning organizations like Woodard ISD demand that the people in the organization act autonomously, draw their own conclusions, lead as well as follow, question difficult issues in a safe manner, and risk failure so that they may build capabilities for future successes (Senge, 2000). For example, Dr. Jones, the former superintendent of Woodard ISD, called upon each of the campus principals to act with autonomy and to “do whatever it takes” to close the achievement gap and to improve student learning. Realizing that each campus had a different culture and that standardized, autocratic visions or mandates were neither sustainable nor appropriate, the campus principals were asked to make decisions and implement practices that would best fit the students, the faculty, and the culture of each campus. In turn, grade levels and subject-area teachers acted with greater autonomy in developing the scope and sequences, incentives, tutorial programs, and parental/community involvement initiatives. And, as the reform effort gained momentum, students began initiating more metacognitive thought processes, thus taking increased responsibility for their own learning. The energy generated from the district’s buy-in of the reform effort was brought about by a common purpose among the students, teachers, and administrators, or shared vision, which nourished a sense of commitment.

Immersed within a culture of mutual respect, the administration, teachers, and students allowed themselves to be coachable, meaning that they were open to

new ideas and able to take direction from others. The learning discipline of personal mastery, which involves creating a coherent image of where an individual in the organization is in relation to where he or she wants to be, sets the stage for improvement or learning to occur within the individual and thus within the organization. It is important to note that throughout this reform initiative, leading and following transcended hierarchal boundaries; not only did the administration lead, but they also took direction from the teachers, whom they regarded as educational experts.

While the teachers, administrators, students, parents, and community had a common purpose and commitment to student learning, many obstacles had to be overcome in order to change the social patterns that were preventing certain students from maximizing their potential. The discipline of mental models is concerned with developing an awareness of attitudes and perceptions of “undiscussable” issues such as race and social status. However, awareness alone is not sufficient. Stakeholders need to develop the capability to talk safely and productively about dangerous and discomfiting subjects (Senge, 2000). Although it seemed uncomfortable at first for stakeholders in Woodard ISD to confront the achievement differences related to race and economic status, in doing so, the district was able to look inward and make changes within the organization rather than blaming the students, their families, or their culture.

When acted upon, true self-assessment, the process of internal evaluation, is a requisite for intrinsic motivation, curiosity, risk-taking and innovation, and personal responsibility (Senge, 2000). Moreover, Senge has contended that only through risking failure can an organization build capabilities for future successes. This was the case in Woodard ISD, as demonstrated by the former superintendent, who said, “I don’t want a yes man. I can find them anywhere. What I want is someone who can come up with ideas and make things happen for kids.” The idea behind the discipline of team learning is not that everyone thinks alike, but that the members of the team reflect, think, and work together in concert, capitalizing on the strengths and interests of the individuals within the group. In Woodard ISD, team learning occurred on a number of levels. At the administrative level, the Curriculum Team, comprised of the superintendent, assistant superintendent, elementary director, secondary director, director of academic services, director of special education, and the personnel director, initiated the reform by establishing goals and support networks. Campus administrators facilitated the Curriculum Team by creating an atmosphere of “family” at the campus level. The culture of support and family was reiterated throughout the district as individuals gained strength from coworkers and administrators. The most vital team as recognized by stakeholders at every level in the district was the student–teacher relationship. Neither campus plans nor bond elections can force students to learn, and rapport

must be established between students and teachers so that many learners, especially those least advantaged, will allow themselves to be taught.

Similar to the interrelatedness of the behaviors of the people in the school system, the most crucial aspect of the organizational learning disciplines is the systemic structure of the organization. The best teacher who is skilled in pedagogical methods and has excellent rapport with students is destined to fail miserably if the system in which he or she works does not function effectively. This scenario occurs in districts far too often. Many times districts have extremely high and immediate expectations for student performance and provide low support for staff development—especially administrator training and development (Senge, 2000). The inevitable result is persistently low achievement. When a district attracts charismatic figures for superintendent or principal positions; encourages them to act as if they know all the answers; and “punishes” them, in subtle and unsubtle ways, when they fail to produce results in a very short time, they tend to leave the school district early or get pushed out. This creates an even more urgent demand for improvement and a truly heroic administrator next time (Senge, 2000). When districts fail to recognize the systemic patterns of behavior and the cause-and-effect relationships of their own actions or failure to take action, any kind of reform initiative ultimately will yield unintended results.

Likewise, the aspect of support, which is so inherent in the discipline of *Systems Thinking*, may possibly explain in part the success in Woodard I.S.D. For

instance, the district's ability to understand interdependency and change and to deal effectively with the forces that shape the consequences of their actions has resulted in low employee turnover, the self-assurance that allows one to acknowledge the fact that they do not have all the answers, and the impetus to alter the way one acts and reacts.

Correlates of Effective Schools

The goal behind the reform effort in Woodard ISD was student learning, which involved a quality education for all children, eliminating achievement differences between students of color, poor students, and White students. Similar to the goal in Woodard ISD, the mission of the correlates of effective schools is learning for all. In addition to the seven interrelated correlates, several basic beliefs or assumptions are the underpinning of the learning for all mission. One of those basic beliefs is that the individual school controls enough variables to assure that all children do learn (Lezotte & Pepperl, 1999). This belief was in essence reiterated throughout the district in Woodard. Neither the teachers nor the administrators made excuses for poor performance. If student achievement in the classroom or on a standardized test was not satisfactory, the district addressed the problem through teacher training, parental involvement, or flexible scheduling allowing the students to receive additional instruction. Another basic belief is that the needed capacity to improve a school currently resides in the school and that the

existing people are the best change agents (Lezotte & Pepperl, 1999). Though many employees in Woodard ISD have changed positions or roles in the district, no one from the outside was ever brought in to lead the reform effort.

The primary leaders in the district consisted of administrators at the central office and principals and highly regarded teachers at each of the campuses. In concert with the correlate of instructional leadership, the leaders in Woodard ISD clearly and effectively communicated the district's mission. From the onset of the reform movement and as deliberated by the Curriculum Team, the focus in the district became student learning, which entailed incremental goals over a 5-year period leading to an *Exemplary* rating by the TEA. With this incremental plan incorporated in the District Improvement Plan, each campus was instructed to include the 5-year plan into the Campus Improvement Plan. The correlate of clear and focused mission aligns with the sustained focus on student learning in Woodard ISD in that the staff shared an understanding of and commitment to the instructional goals, priorities, assessment procedures, and accountability (Lezotte, 1997). Although no one from the outside was hired to come into the district to initiate the reform, educators did look outside the district for best practices that could be imported into the district through professional development. In addition, several teachers and administrators came to see their role as not simply teaching but rather ensuring learning.

This shift from teacher input to student performance required the successful implementation of another correlate, frequent monitoring of student progress. Using the state-mandated curriculum, the TEKS, district teachers were given release days to create scope and sequences and benchmark assessments that were unique to grade levels and subject areas. Setting a criterion for desired results, measuring student progress through the assessments, and then using the assessment data to improve performance and the district's instructional programs facilitated the district's sustained focus on student learning.

Frequent monitoring of student progress also involved the teachers' recording and reporting to the Curriculum Team their students' scores disaggregated by race and socioeconomic status as a way of making teachers cognizant of African American, Hispanic, and low socioeconomic students' scores. But, the pivotal act that functioned as the most powerful catalyst for increasing the focus on student learning was the collective dissemination of the benchmark results to all of the teachers who gave the same assessment. This public display of results had a profound affect on the teachers' behavior. While the sharing of personal results served to inform the teacher of where his or her students stood in comparison to other teachers' students, this means of reporting results led to intense competition and pride. Teachers began allocating more time to the instruction of TAAS objectives, abandoning less important content, as well as using time at school more efficiently, thus paralleling with the correlate of

opportunity to learn and student time on task. One such instructional strategy used to sustain focus on student learning was interdisciplinary teaming. By pairing social studies with language arts and math with science, teachers resolved many issues associated with time constraints. Likewise, the middle school and high school implemented block scheduling as a way to make better use of time, not to mention one middle school double blocking mathematics in order to provide students additional time on task. The district used another such strategy, “organized abandonment.” As teachers aligned the scope and sequences with the TEKS and as these documents were revised on an annual basis, the curriculum was gradually narrowed, removing nonessential or ineffective lessons and objectives. The resulting curriculum left little room for nonacademic activities and focused solely on student learning.

While the stakeholders remained focused on the common goal of student learning, the reciprocal support in the district allowed that focus to sustain. The correlate of safe and orderly environment was critical in providing the support necessary for the school environment to be conducive to learning for all. Primarily, teachers and principals in Woodard ISD recognized and respected human diversity. It became apparent that all children could not be treated the same. Circumstances needed to be considered in discipline, and learning styles needed to be considered in teaching. Though all students were held to the same standard, teacher and student interaction was examined in order to discover ways to diffuse

discipline problems before they escalated. One program, Disciplining with Dignity, helped teachers address problems in nonconfrontational, respectful ways, thus bringing students back on task and developing rapport with students. In addition, another program, Peer Counseling, was implemented to offer students alternatives to violence and conflict-resolution strategies through one-on-one student counseling, individual and group peer education, and peer conflict mediation. These programs, as well as effective principals, coaches, and teachers who were proactive and visible around the campus, helped the district to create an orderly, purposeful, businesslike atmosphere free from the threat of physical harm and conducive to teaching and learning, synonymous with the correlate, safe and orderly environment.

The absence of undesirable student behavior coupled with a school environment conducive to learning was not the only support system in Woodard ISD. The parents seemed to feel comfortable approaching the teachers and administrators with concerns and had a general trust in the school system, supporting the district's goal of earning an *Exemplary* rating. Early in the school year, teachers were strongly encouraged to build rapport with parents by making positive contacts as a means of encouraging involvement and parental support, which closely resembles the correlate of home-school relations. Teachers clearly explained to parents via telephone calls, notes, conferences, or orientations the student expectations and the expectations for the parents. As a result, Woodard

ISD teachers noted that once a constructive relationship had been forged with parents, they had very little problem with student effort, students' turning in homework, having students attend tutorials outside of regular school hours, or managing discipline problems.

Over time the sustained focus on student learning and the support within and outside the district led to teacher efficacy. The high expectations teachers had for themselves, their students, and the school district was met with success, and as a consequence, the students began expecting more of themselves. With the continued accomplishments experienced by the district as a whole, both student and district efficacy flourished. This phenomenon compares with the correlate, climate of high expectations for success, which anticipates high student achievement and assures that mastery occurs through reteaching, regrouping, or other organizational responses when students do not learn (Lezotte, 1991, 1992, 1997).

It is important to understand that all seven correlates are interdependent; the successful implementation of one correlate may be contingent upon the successful implementation of another correlate. Equally important, the founders of the effective schools movement defined learning in terms of the individual student, teachers, school, district, and state and have created a new mission statement for the 21st century school district: "Learning for all: Whatever it takes." Pursuant to

this mission, Woodard ISD has demonstrated that kind of dedication to their journey of continuous improvement.

Total Quality Management in Education

Akin to the basic operational tenets of the effective schools movement, total quality management in education also represents a compilation of proven management principles and associated implementation processes, which, when properly implemented, result in significant improvement in valued organizational aims (Lezotte, 1992). Likewise, the change process that occurred in Woodard ISD closely followed Deming's 14 points for management relative to educational environments. For example, one of the findings from the study revealed that a sustained focus on student learning assisted the district in eliminating achievement differences. In fact, 5 of Deming's 14 points concentrate on maintaining a clear focus on the organization's mission.

The quality principle of improve constantly and forever the system of production and service is centered around a sustained focus on continual improvement. The stakeholders in Woodard ISD strove for continuous improvement in much the same manner as the Plan-Do-Study-Act Cycle. This approach toward quality control in educational settings was also similar to the methods condoned by English (1992); in order to improve student performance, clear goals or objectives were put in place. Secondly, human activity was directed

toward accomplishing the goals and objectives. Finally, in studying the results, feedback was gathered about system performance, and those data were then used to examine current levels of student performance, thus increasing efficiency and effectiveness.

In line with the sustained focus on student learning, the quality principle, create constancy of purpose toward improvement of product and service, was also demonstrated in Woodard ISD by the increased student achievement and the presence of equity and quality. The district's benchmark assessments functioned as operational indicators of quality learning outcomes with the purpose of providing disaggregated student achievement data regarding race and socioeconomic status, which allowed teachers to target students needing remediation. This focused monitoring of student achievement data correlates with the quality principle of cease dependence on mass inspection in that the assessments were given as diagnostic and prescriptive instruments to be used to plan for instruction rather than as punishment.

The reason, in part, for the teachers' strong dedication and sustained sense of mission in the district involved the quality principle, eliminate slogans that ask staff for new levels of productivity without providing new methods. The collaborative planning and problem-solving that focused attention on training, technical assistance, and support rather than "quick fix" slogans offered the teachers a chance to buy-in to the reform movement, which was essential to

accomplish the transformation. The district's sustained focus on earning an *Exemplary* rating was so deeply embedded within the culture and structure of the district, the 5-year plan to earn the *Exemplary* rating was realized one year ahead of schedule. This dedication to full implementation was completely in sync with the quality principle, take action to accomplish the transformation.

While the aforementioned Quality Principles all deal primarily with focus on continuous improvement, five more of Deming's 14 Quality Principles are chiefly concerned with reciprocal support, a second finding that emerged from the study. Two of the quality principles, institute programs of training and institute a vigorous program of education and retraining involve staff development and organizational development that changes the level of teacher involvement in decision-making and problem-solving. As principals learn to manage teacher commitment through teacher involvement, greater autonomy can be enjoyed. This leads to the quality principle of institute leadership, which promotes leaders leading leaders. Through promoting personal competence, collaboration, and peer coaching, instruction in Woodard ISD was improved substantially. The investment in training and staff development and the district's requirement that all faculty members observe respected peers teaching resulted in the learning needs of the children and the instructional needs of the teachers being met.

Along the same line, the quality principle, break down barriers between staff area, combines talents of departments to break down role and status barriers

to productivity. Creating interdisciplinary teams, observing the practices of colleagues, the decentralized administration, site-based management, and the support networks within and outside the district collaboratively acted to empower the teachers in Woodard ISD.

In regard to the fifth quality principle regarding support—drive out fear so that everyone may work effectively for the organization—there was a thin line between fear and accountability. Fear or a sensation very comparable to it may have acted to motivate individuals in the district who were not producing the desired results. When the academic achievement of a child is at stake, it is not difficult to become an ardent advocate for that child, many times at the expense of the adult charged with negligence. Although no one in Woodard ISD ever lost his or her job due to low student performance, a sense of pressure invaded the culture of the district at the onset of the reform effort; but over time and with continual success, teachers began to develop a sense of confidence in their teaching ability, which ultimately led to efficacy.

One tenet of the quality principle of remove barriers to pride and joy in workmanship claims that the greatest barrier between teachers and pride of their workmanship has to do with how school and teacher effectiveness are assessed (Lezotte, 1992). Because the district had experienced so much success with the state assessment, school evaluations contributed to the efficacy among the stakeholders in the district. Individual teacher evaluations, on the other hand, were

perceived in two different ways. Many in the district viewed teacher appraisals as merely a formality that satisfied state mandates, while others experienced tension and apprehension. Whether the negative feelings regarding teacher appraisals were founded or unfounded was immaterial. As a state operating under an accountability system based on protecting and insuring quality and equity for the least advantaged children, measures for monitoring and assessing teacher and administrator performance are indispensable.

Two other quality principles, adopt a new philosophy and end the practice of doing business on price tag alone align with the theme of remedying academic discrimination. Within the framework that all students can learn, what students learn in school depends on what the adults in the school do (Lezotte, 1992). In Woodard ISD improved quality and equity required all the adults in the school to be accountable for student learning and to make necessary adjustments within themselves or within the district to insure that all students, regardless of race or socioeconomic status, achieved at high academic levels. In order for this to be done, the district allocated both the human and financial resources that were needed to insure that quality was established—regardless of the cost. The implementation of block scheduling, the double blocking of mathematics in the middle schools, the release days for curriculum planning, the computer software that disaggregated data, as well as hiring counselors for every elementary are some examples of how Woodard ISD channeled human and fiscal resources directly to

the students. It is important to note, however, that in comparison to districts of equal size and student composition, Woodard ISD has the lowest administrative expenditure and one of the lowest expenditures per student.

Focused Equity Practices

Focused equity practices emerged from a study by Scheurich, Skrla, and Johnson (2000a) of system-wide achievement in four multicultural Texas school districts. These four districts operated under the same accountability system, as did the Woodard school district. Therefore, the findings from the Woodard ISD study regarding the Texas Accountability System acting as the key infrastructure of the district transformation are very much in line with the findings from Scheurich et al. (2000a) concerning supervising, evaluating, and holding people accountable. In both studies the state and local accountability standards were used as the baseline for accountability of everyone involved in the instructional program. Performance evaluations and administrative salary increases or bonuses were based on student performance and the willingness of individuals to pursue excellence and equity in teaching and learning. Different from the Scheurich et al. (2000a) study, the stakeholders in Woodard ISD were not in jeopardy of losing their jobs. Although a tremendous amount of pressure was placed upon all the stakeholders to insure equally high performance from all students, the extraordinary quantity of social capital within the culture of the community motivated the employs to conform to

the district's expectations. While a few teachers and administrators retired or moved on to other districts due to the new requirements and changes in the district, these individuals were treated with dignity and respect.

Parallel with the finding of the strong desire to remedy academic discrimination are Scheurich et al.'s (2000a) equity beliefs that African American, Hispanic, White, middle class, and economically disadvantaged students were all expected to learn at equally high academic levels. Analogous with *Equity-Driven Achievement-Focused School Districts*, the decisions in Woodard ISD were focused on supporting equity and improving learning by providing different educational environments, services, and programs to those who were unsuccessful in the existing setting. The process of allocating both the human and financial resources that were needed to insure that quality was established followed the focused equity practice of acquiring, allocating, and aligning fiscal, human, and material resources, as well as, the quality Principle, and the practice of doing business on price tag alone.

Similar to the other three theories, focused equity practices are heavily concerned with a sustained focus on student learning. The practices of collecting, interpreting, and using data and monitoring results, Refocusing energies, refining efforts, and ensuring continuous performance, and generating, directing and maintaining focus were quintessential to the area of focus in the Woodard ISD study. Using the quality tool Plan-Do-Study-Act, the Curriculum Team evaluated

the existing programs in terms of the contribution to improved student performance and the programs were kept, improved, or replaced. The result was better prepared teachers, the implementation of research-based and proven academic programs, and improved academic achievement for all students.

Corresponding with the theories of organizational learning disciplines, correlates of effective schools, and total quality management in education, focused equity practices place a strong emphasis on reciprocal support. A tremendous contribution of focused equity practices is the distilled theoretical jargon of the other three theories into practical applications with proven results. Comparable with the principle of building and supporting capacity in people to contribute and lead, Woodard ISD implemented extensive professional development for teachers and administrators to improve instruction. Open Court Reading, Jane Shaffer Writing, Grace Stassney Mathematics, Everyday Mathematics, and TEKS for Leaders were only a few of the professional development opportunities provided for the district. What might have proven to be the most beneficial opportunities for the teachers, however, were the release days provided periodically throughout the year, which allowed the teachers to analyze these commercial programs and to adapt and to combine other programs that were most relevant and appropriate for the students and culture of Woodard ISD.

Likewise, using the state curriculum, the TEKS, Woodard teachers followed the principles advocated by Fenwick English in aligning the scope and

sequences with the TEKS and creating benchmark assessments that aligned with the testable curriculum, thus patterning the focused equity practice of developing and aligning curriculum and delivering instruction. Although the support network in Woodard ISD was pivotal in maintaining the focus on student learning, the alliances with business and community was not as central in broadening the district's ability to encourage and to support instruction as was the case in the Scheurich et Al. (2000a) study regarding the focused equity practice, creating and nurturing alliances.

Summary

Components of each of the four theories were evidenced in the Woodard study; yet some of the theories were more closely aligned with the reform movement than others. For instance, while the organizational learning disciplines were clearly in alignment with the findings of sustained focus on student learning and reciprocal support of all stakeholders, this theory was not fundamentally concerned with the Texas Accountability System, remedying academic discrimination, or efficacy. Similarly, although the correlates of effective schools and total quality management in education acknowledge that accountability and state departments of education can benefit education, neither theory parallels with accountability to the degree that the Texas Accountability System does. As was mentioned previously, the Woodard study and the Texas districts from the

Scheurich et al. (2000a) study all functioned under the same accountability system, and in each case, the Texas Accountability System was a crucial catalyst for eliciting change.

Other comparisons reveal that with the Texas Accountability System used as the basis for measuring success, the quality principle, eliminate numerical quotas, is somewhat of a paradox. From the paradigm of total quality management in education, the quantified goal of 90% of every student group passing the state assessment seems to result in goal displacement. In other words, the goal becomes an end in itself, risking school improvement becoming convoluted in the test scores, communicating unrealistically low expectations for what is possible (Lezotte, 1992). Though the goal of earning an *Exemplary* district rating may seem arbitrary from the lens of total quality management in education, according to the Just For Kids organization, which provides an in-depth analysis of schools' performance trends, strengths and weaknesses, and capacity for academic improvement, Woodard High School ranked second in the state in reading and third in the state in mathematics among comparable schools. Likewise, Woodard Middle School East ranked first in the state among comparable schools in mathematics and in writing, second in the state among comparable school in reading and in science, and fifth in the state among comparable schools in social studies.

Each of the four theories shares many of the same components and yet has unique attributes. While all the theories have been extensively researched and yielded proven, effective results, the similarities inherent in each may fall into the growing body of literature regarding best practices in education. The cumulative theories and findings from this study may provide a basis for forming broad and generalizable perspectives on reform. Although no theory or program can yield identical results when applied to a different environment, the commitment and dedication on the part of the stakeholders within the school can act as the channel through which all the students within the organization can achieve equally high academic levels.

Recommendations for Further Study

The findings from this study suggest three possible recommendations for future research. These recommendations are examined in the following sections.

Case Studies of Other Districts

Due to the contextual complexity of factors involved in the research setting, the results and findings derived from one study cannot be implemented in lockstep with other settings. While there are generalizable practices that can be adapted to improve student performance, the most important rationale for recommending more case studies that showcase how whole districts have

eliminated achievement differences among African American, Hispanic, poor, and White children is to refute dominant beliefs that achievement gaps cannot be eliminated. The predominance of deficit thinking that so often invades the decisions and actions of policymakers, practitioners, and taxpayers uses power to enforce social inequity, thus preventing economically disadvantaged students and students of color from attaining academic success. The intent for more research relating to successful and highly diverse school districts is to contribute to the growing body of research that presents an alternative to the dominant stereotypical assumptions that are held in regard to the least advantaged children in our society.

The Impact of the Texas Accountability System

Designed in an attempt to confront and solve equity and excellence issues in the Texas education system, the Texas Accountability System has increased the quality of instruction and, to some degree, has aided in making progress toward closing the state-wide achievement gap (TEA, 2001). Yet numerous researchers and activists continue to criticize the Texas Accountability System, claiming a plethora of flaws inherent in the system. Research involving the influence of the Texas Accountability System on local policies would contribute to an enhanced perception of the benefits and drawbacks of accountability.

Does Social Capital Influence the Successful Implementation of Reform Initiatives?

The term *social capital* involves a wide variety of benefits that flow from the trust, reciprocity, information, and cooperation associated with social networks (Putnam, 2000). The followership, reciprocal support, and efficacy of the teachers and administrators in Woodard ISD was possibly due to the high social capital experienced in the culture of the district. Further research could determine if followership, reciprocal support, and efficacy could be experienced within a reform effort if the stakeholders involved did not possess high levels of social capital.

Conclusion

The data gathered over the last year regarding Woodard ISD continually substantiated the high levels of academic achievement of all students. On paper, this data was quite impressive, but in person, the data came to life. The administrators were strong instructional leaders, who were visible on the campuses and available to interact with parents, teachers, and students. Likewise, the teachers' enthusiasm was remarkable; their eagerness to share their success and engage in pedagogical dialogue was thoroughly intriguing. What was most surprising, however, was the teachers' inability to recognize how accomplished they really were. This probably came from the teachers' only being exposed to the

high levels of success experienced in the district. Similarly, from observing students on campus and off campus at UIL events, students consistently displayed dignity, self-respect, and efficacy.

While this school district and community serve as an inspiration, it is regretful that thousands of other children less fortunate than those in Woodard ISD continue to be sacrificed at the hands of educational systems that either do not know what to do or do not see the need to change social inequities that discriminate against the historically deprived and underrepresented members of our society. The reform that occurred in the Woodard school district is evidence that change is possible and that providing an equitable and quality education does not involve a great deal of money or time.

Appendix A

The Deming Paradigm and Conceptual Change

Deming's 14 Points: A Theory for Management Transformation

1. Create constancy of purpose toward improvement of product and service, with the aim to become competitive and to stay in business, and to provide jobs.
2. Adopt the new philosophy. We are in a new economic age. Western management must awaken to the challenge, must learn their responsibilities, and take on leadership for change.
3. Cease dependence on inspection to achieve quality. Eliminate the need for inspection on a mass basis by building quality into the product in the first place.
4. End the practice of awarding business on the basis of price tag. Instead, minimize total cost. Move toward a single supplier for any one item, on a long-term relationship of loyalty and trust.
5. Improve constantly and forever the system of production and service, to improve quality and productivity, and thus constantly decrease costs.
6. Institute training on the job.
7. Institute leadership (see point 12). The aim of supervision should be to help people and machines and gadgets to do a better job. Supervision of management is in need of overhaul, as well as supervision of production workers.
8. Drive out fear, so that everyone may work effectively for the company.
9. Break down barriers between departments. People in research, design, sales, and production must work as a team, to foresee problems of production and in use that may be encountered with the product of service.
10. Eliminate slogans, exhortations, and numerical targets for the work force asking for zero defects and new levels of productivity.
11. Eliminate work standards (quotas) on the factory floor. Substitute leadership. Eliminate management by objective. Eliminate management by numbers, numerical goals. Substitute leadership.
12. Remove barriers that rob people in management and in engineering of their right to pride of workmanship. This means, inter alia, abolishment of the annual or merit rating and of management by objective.
13. Institute a vigorous program of education and self-improvement.
14. Put everyone in the company to work to accomplish the transformation. The transformation is everybody's job.

Source: Deming, W. E. (1986). *Out of the Crisis*. Cambridge, Mass.: MIT Center for Advanced Engineering Study.

Appendix B

Deming's 14 Points Applied to Schools

DEMING'S POINT

1. Create constancy of purpose for improvement of product and service.

2. Adopt the new philosophy.

3. Cease dependence on mass inspection.

THE APPLICATION IN SCHOOLS

Schools must focus on helping students to maximize their own potentials through continuous improvement of teachers' work together. Maximization of test scores and assessment symbols is less important than the progress inherent in the continuous learning process of each student.

School leaders must adopt and fully support the new philosophy of continuous improvement through greater empowerment of teacher-student teams. Cynical application of the new philosophy for the sole intent of improving district-wide test scores destroys interpersonal trust, which is essential to success.

Reliance on tests as the major means of student production is inherently wasteful and often neither reliable nor authentic. It is too late at the end of the unit to assess students' progress if the goal is to maximize their productivity. Tests and other indicators of student learning should be given as diagnostic and prescriptive instruments throughout the learning process. Learning is best shown by students' performance, applying information and skills to real-life challenges. Students must be taught how to assess their own work and progress if they are to take ownership of their own educational processes.

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| 4. End the practice of doing business on price tag alone. | Build relationships of trust and collaboration within the school, and between the school and the community. Everyone's roles as supplier and customer must be recognized and honored. Work together whenever possible to maximize the potentials of students, teachers, administrators, and community. |
| 5. Improve constantly and forever the system of production and service. | School administrators must create and maintain the context in which teachers are empowered to make continuous progress in the quality of their learning and other aspects of personal development, while they learn valuable lessons from (temporary) failures. |
| 6. Institute programs of training. | School leaders must institute programs of training for new employees unfamiliar with the specific culture and expectations of the school. Effective training programs show new teachers how to set goals, how to teach effectively, and how to assess the quality of their work with students. Teachers must also institute programs in which students learn how to set learning goals, how to be more effective in their schoolwork, and how to assess the quality of their own work. Teachers should show students by attitude and actions what a good learner is all about. (Educators learn how to be educators from the modeling they receive as students.) |
| 7. Institute leadership. | School leadership consists of working with teachers, parents, students, and members of the community as coach and mentor so that the organizational context in which all students' growth and improvement is valued and encouraged can be maximized by teachers and students, parents, and community members who support the common effort. Leading is helping, not threatening or punishing. |

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| 8. Drive out fear. | Fear is as counterproductive in school as it is in the workplace. Fear is destructive of the school culture and everything good that is intended to take place within it. Institutional changes must reflect shared power, shared responsibilities, and shared rewards. |
| 9. Break down barriers between staff area. | Teacher and student productivity is enhanced when departments combine talents to create more integrated opportunities for learning and discovery. Create cross-departmental and multi-level quality teams to break down role and status barriers to productivity. |
| 10. Eliminate slogans, exhortations, and targets for the workforce. | Teachers, students, administrators, families, and community members may collectively arrive at slogans and exhortations to improve their work together, as long as power, responsibility, and rewards are equitably distributed. When educational goals are not met, fix the system instead of fixing blame on individuals. |
| 11. Eliminate numerical quotas. | Assignments and tests that focus attention on numerical or letter symbols of learning and production often do not fully reflect the quality of student progress and performance. When the grade becomes the bottom-line product, short-term gains replace student investment in long-term learning, and this may prove counter-productive in the long run. |
| 12. Remove barriers to pride and joy of workmanship. | Teachers and students generally want to do good work and feel pride in it. Schools must dedicate themselves to removing the systemic causes of teacher and student failure through close collaborative efforts. |

13. Institute a vigorous program of education and retraining.

All of the school's people benefit from encouragement to enrich their education by exploring ideas and interests beyond the boundaries of their professional and personal worlds. Administrators, teachers, and students require continuous learning programs if the school is to be on the leading edge and maximize customer satisfaction.

14. Take action to accomplish the transformation.

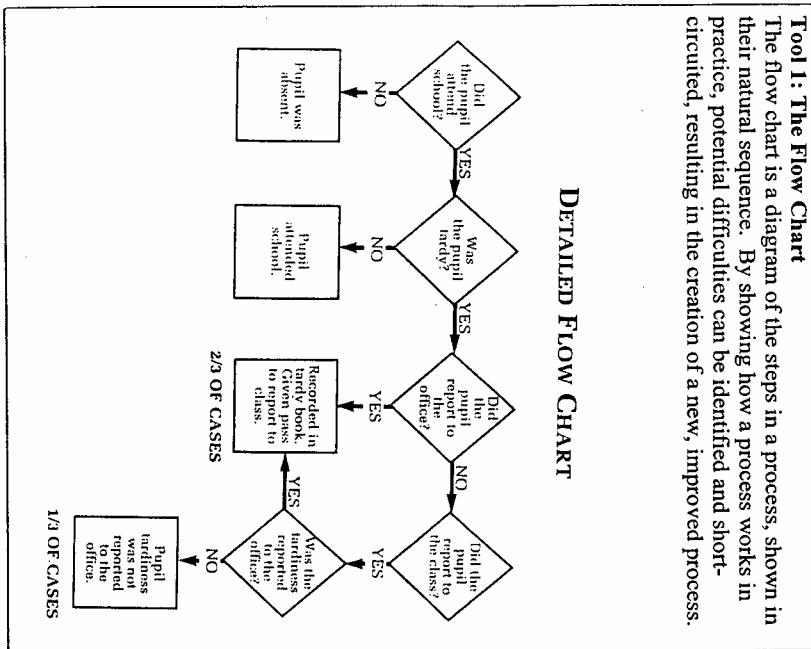
School personnel at all levels (including students) must put this new philosophy into action so it becomes embedded into the deep structure and culture of the school. Teachers and students alone cannot put the plan into effect. Constant top-level dedication to full implementation must be supported by a critical mass of school and community people to implement the plan and make it stick.

Source: Bonstingl, J. (1996). *Schools of Quality: An Introduction to Total Quality Management in Education*. Alexandria, VA: Association for Supervision and Curriculum Development.

Appendix C The Seven Traditional Tools for Transformation

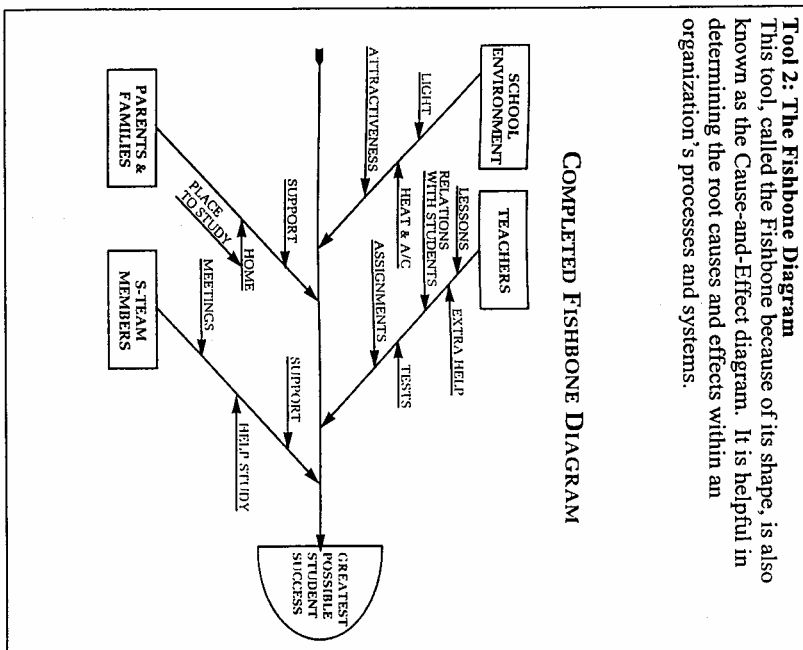
Tool 1: The Flow Chart

The flow chart is a diagram of the steps in a process, shown in their natural sequence. By showing how a process works in practice, potential difficulties can be identified and short-circuited, resulting in the creation of a new, improved process.



Tool 2: The Fishbone Diagram

This tool, called the Fishbone because of its shape, is also known as the Cause-and-Effect diagram. It is helpful in determining the root causes and effects within an organization's processes and systems.

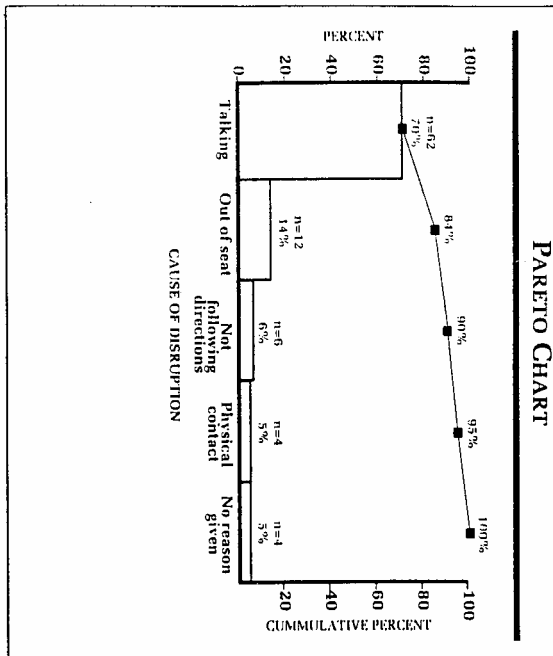


Source: Bonsingel, J. (1996). *Schools of Quality: An Introduction to Total Quality Management in Education*. Alexandria, VA: Association for Supervision and Curriculum Development.

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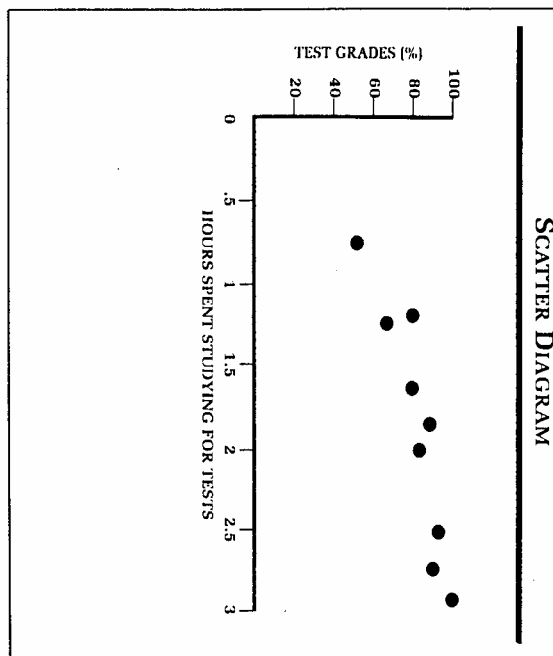
Tool 3: Pareto Chart

The Pareto Chart is named after the 19th century Italian economist Vilfredo Pareto. The Pareto Principle touts that as few as 20% of the vital few factors are responsible for the vast majority (80%) of all problems. The Pareto Chart identifies the vital few factors that require attention first.



Tool 4: The Scatter Plot

The Scatter Plot is a tool used to analyze the correlation between two variables.

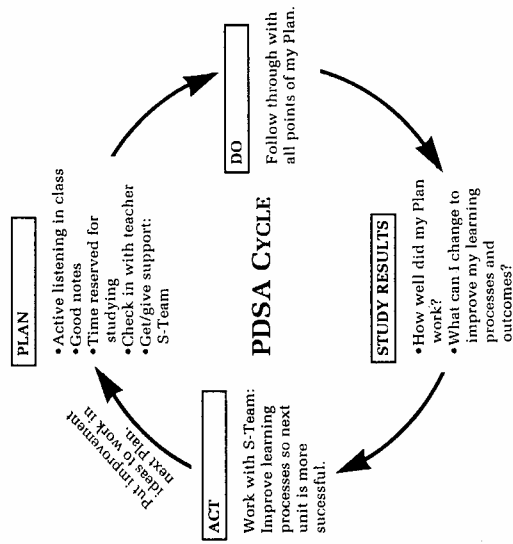


Source: Bonsingl, J. (1996). *Schools of Quality: An Introduction to Total Quality Management in Education*. Alexandria, VA: Association for Supervision and Curriculum Development.

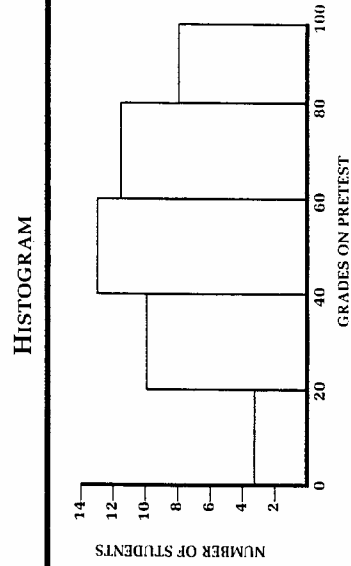
Appendix C

The Seven Traditional Tools for Transformation

Tool 5: The PDSA Cycle
The Plan-Do-Study-Act Cycle is useful in carrying on continuous improvement processes. The PDSA Cycle is a model of the way people learn, so it can help us analyze and improve the processes we use in getting a job done.



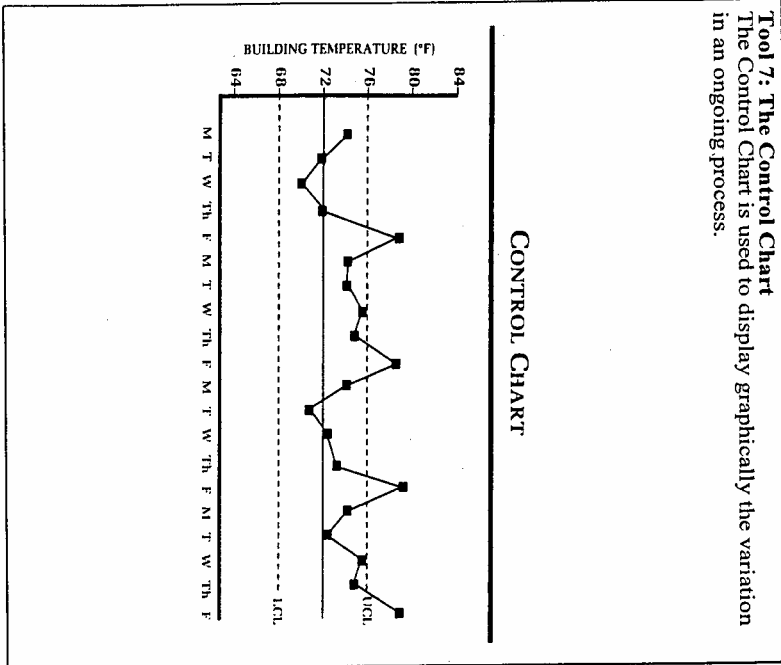
Tool 6: The Histogram
The Histogram is a bar chart representation of the spread or dispersion of variable data.



Source: Bonstingl, J. (1996). Schools of Quality: An Introduction to Total Quality Management in Education. Alexandria, VA: Association for Supervision and Curriculum Development.

Appendix C The Seven Traditional Tools for Transformation

Tool 7: The Control Chart
The Control Chart is used to display graphically the variation in an ongoing process.



Source: Bonstingl, J. (1996). Schools of Quality: An Introduction to Total Quality Management in Education. Alexandria, VA: Association for Supervision and Curriculum Development.

Appendix D

Academic Excellence Indicator System for the State of Texas Performance Indicators

1. TAAS passing rate by grade, by subject, and by all grades tested
2. End-of-Course examination – participation and results
3. Attendance rate for the full year
4. Dropout rate (by year)
5. Graduation and dropout rates (4-year longitudinal)
6. Percent of high school students completing an advance course
7. Percent of graduates completing the Recommended High School Program
8. AP and IB examination results
9. TAAS/TASP equivalency rate
10. SAT and ACT examination – participation and results

Performance on each of these indicators is shown disaggregated by ethnicity, special education, and low-income status. The reports also provide extensive information on school and district staff, finances, programs, and demographics.

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Vita

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