The Relationship Between School Culture And Student Achievement In Middle Schools

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THE RELATIONSHIP BETWEEN
SCHOOL CULTURE AND STUDENT ACHIEVEMENT
IN MIDDLE SCHOOLS

by

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A dissertation submitted in partial fulfillment of the requirements
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in the Department of Educational Research, Technology and Leadership
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ABSTRACT

This study was developed to produce data about the cultures of selected Florida middle schools. The research was intended to contribute to the existing body of knowledge on collaboration, collegiality, and self-determination/efficacy as related to student achievement. The focus for this study was provided through three research questions: (a) to determine to what extent middle schools scoring in the top half and the bottom half on the modified version of Wagner and Masden-Copas’ School Culture Triage Survey differed on various demographic elements; (b) to determine what differences, if any, existed between the cultures of the selected Florida middle schools and student achievement as measured by the percentage of middle school students scoring at level 3 and above on the 2004-2005 Florida Comprehensive Assessment Test (FCAT) reading portion; and (c) to determine what relationships, if any, existed among the three key areas of school culture (collaboration, collegiality, and self-determination/efficacy) and student achievement.

The population of this study was comprised of instructional personnel employed at one of the six participating middle schools in Osceola County School District, Florida during the 2004-2005 school year. One middle school chose not to participate in the study. Data were generated from the six middle schools using a self-administered survey.

Based on an extensive review of literature and the research findings, it was concluded that sixth, seventh, and eighth grade students that attended schools with higher culture scores produced higher FCAT reading scores. The reverse was also true: sixth, seventh, and eighth grade students that attended schools with lower culture scores
produced lower FCAT reading scores. There was a relationship between the three key areas of school culture (collaboration, collegiality, and self-determination/efficacy) and the reading achievement of sixth, seventh, and eighth grade students.
I would like to dedicate this study to my five nieces and nephews: Kristen Vislocky, Ryan Osborne, Lauren Osborne, James Vislocky, and Jake Vislocky, whom I love dearly. I hope that through my hard work and successful completion of my doctoral program, I have set an example. I want him or her, and every adolescent that I come into contact with, to love learning. I want each of them to value education and always strive to do their best. They are the leaders of the future and I am so proud of their successes to date.
ACKNOWLEDGMENTS

The completion of this study would not have been possible without the help of my committee members: Dr. George E. Pawlas, chairman, Dr. Rosemarye Taylor, Dr. Dianna Stone, and Dr. Lea Witta. I appreciate your guidance, input, and expertise. It was a pleasure to work with you.

I would like to thank the principals at the six participating middle schools in Osceola County School District, Florida during the 2004-2005. Without their approval, this research study would not have been conducted.

I would also like to thank the reading coaches and the instructional personnel who participated at each of the middle schools. The end of the school year is busy, and at times, hectic. I truly appreciate the reading coaches help with the distribution and return of the surveys and the instructional personnel for taking the time to complete the surveys.
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CHAPTER 1

PROBLEM STATEMENT AND DESIGN COMPONENTS

Introduction

The Florida Legislature intended that all public schools be held accountable for students performing at acceptable levels. On January 8, 2002, President Bush signed into law *The No Child Left Behind Act of 2001* (NCLB). The purpose of the act was to ensure that all children had a fair, equal, and significant opportunity to obtain a high-quality education. With such an education, children could reach pre-determined proficient levels on challenging state academic achievement standards and state academic assessments. Four basic education reform principles were prevalent in NCLB: (a) stronger accountability for student performance; (b) reduced bureaucracy and increased local control and flexibility; (c) parent empowerment due to expanded options; and (d) proven teaching strategies implemented because the focus was on what works. The goal of NCLB was to have 100 percent of students proficient by 2013-2014 (www.fldoe).

Under this new accountability system, states must describe how they will close the achievement gap, ensuring that all students achieve academic proficiency. Students in grades three through twelve must be tested annually in reading and math. Annual state and school district report cards must be produced that inform the parents and the community about the progress made. By 2005-2006, each classroom must be staffed with a highly qualified teacher (www.ed.gov/nclb). Educational researchers have
outlined the importance of school cultures that value and advocate change funneled towards standards-based reform initiatives.

Organizational culture embodies organizational beliefs, feelings, behaviors, and symbols. In essence, organizational culture entails shared philosophies, ideologies, beliefs, feelings, assumptions, expectations, attitudes, norms, and values. When organizational members communicate with one another, they speak a common language, use similar terms, and observe similar rituals and ceremonies. Standards of behaviors evolve in the workplace, as group norms result in benchmarks and standards. Typical examples of dominant organizational values in schools include high performance expectations of teachers and students, low absentee and drop out rates, and a high degree of efficacy. Schools articulate their philosophy through vision and mission statements (Bolman & Deal, 1997).

A school develops its unique personality gradually. Expected patterns of behavior evolve into unspoken expectations. The strongest norms become the school’s rituals, traditions, and rules. “The culture dictates the way things are done and the way people are supposed to act” (Gruenert, 2000, p. 14). A person learns the school’s culture when he or she breaks an unspoken rule. Through observation and listening, a person can detect acceptable methods for adults to verbally and non-verbally communicate with one another and with students.

Bolman and Deal (1997) described culture as a product and a process. As a product, culture is defined by the wisdom of people who were working in the school long before the present members arrived. As a process, culture is ever evolving and renewed
through new members as they learn the ways of the school and reinforce them in their interactions with others. A school’s principal is the most significant force in effecting change in that school’s culture (Stoll & Fink, 1996).

Effective school leaders implement best practices of classroom management, curriculum and instructions, and assessment to meet the needs of all students. School leaders derive their power from legitimate, expert, and referent sources, as they engage in shared leadership, motivate professional and support staff, and intertwine contemporary research discoveries with district policies and procedures. These prescribed methods produce maximal efficiency and effectiveness (Sergiovanni, 1992).

Twenty-first century school leaders must transform their role from managers to instructional leaders to emphasize improved instructional outcomes. Although educational administration is rooted in business hierarchies, schools are unique. Business philosophies are incongruent with educational processes, purposes, or desired outcomes. Educators must describe an educational leadership paradigm through developing a new theory congruent with the core educational philosophies, including the teaching-learning process, curriculum development, and accountability for results (Sergiovanni, 1996).

Purpose of the Study

NCLB was designed to change the culture of America’s schools by closing the achievement gap, offering more flexibility, giving parents more options, and teaching students with research based strategies that work in the classroom (www.ed.gov/nclb). Researchers have concluded that a relationship exists between school culture and student achievement, as well as how students behave and feel about school, themselves, and
How students react to school increases their chance of staying in school, developing a lasting commitment to learning, and using the school setting to their advantage (Arter, 1989). Saranson (1982) indicated that failure to understand school culture has inhibited educational innovations. The purpose of this study was to determine the degree of the relationship between school culture and student achievement.

**Statement of the Problem**

The problem of this study was threefold: (a) to determine to what extent middle schools scoring in the top half and the bottom half on the modified version of Wagner and Masden-Copas’ *School Culture Triage Survey* differed on various demographic elements; (b) to determine what differences, if any, existed between the cultures of the selected Florida middle schools and student achievement as measured by the percentage of middle school students scoring at level 3 and above on the 2004-2005 Florida Comprehensive Assessment Test (FCAT) reading portion; and (c) to determine what relationships, if any, existed among the three key areas of school culture (collaboration, collegiality, and self-determination/efficacy) and student achievement.

**Assumptions**

The specific assumptions of this study were:

1. It was assumed that the survey sample was representative of the population of middle school instructional personnel employed by Osceola County School District, Kissimmee, Florida.

2. It was assumed that participants responded honestly to the survey questions.
3. It was assumed that the survey instrument was appropriate to obtain participants’ self-ratings of school culture.

4. It was assumed that responses from the survey would provide accurate data regarding school culture.

**Delimitations**

The study was delimited to the responses of instructional personnel at six of the seven middle schools in Osceola County School District, Florida during the 2004-2005 school year. Responses from the population were obtained through a self-administered survey instrument.

**Definition of Terms**

The following definitions are included to clarify terms used in the study:

**Accountability:** Florida’s accountability system for all public schools includes multiple measures: Adequate Yearly Progress (AYP) as defined by federal law, school grades as defined by state laws, individual student progress towards annual learning targets to reach proficiency, and a return on investment measure linking dollars spent on student achievement (www.ed.gov/admins).

**Collaboration:** Teachers work together to alter the curriculum and pedagogy within subjects and make connections between subjects and the work (Inger, 1993).

**Collegiality:** Teachers’ involvement with their peers, whether it be intellectual, moral, political, social, and/or emotional (Jarzabkowski, 2002).
Florida Comprehensive Assessment Test (FCAT): An assessment administered in the spring of each year to students in grades 3-10 attending Florida public schools to assess student achievement of the high-order cognitive skills represented in the Sunshine State Standards (SSS) in reading, writing, mathematics, and science (www.firn.edu/doe/sas).

Proficiency: The percentage of students scoring at level 3 and above on the FCAT reading. This test is currently administered in grades 3-10 to assess students’ achievement of the Sunshine State Standards (SSS) in reading (www.ed.gov/admins).

School Culture: The beliefs, attitudes, and behaviors that characterize the school in terms of how people treat and feel about each other, the extent to which people feel included and appreciated, and the rituals and ceremonies reflecting collaboration and collegiality (Phillips, 1993).

Self-determination/Efficacy: Teachers’ belief that they can influence how well students learn, even difficult and unmotivated children (Guskey & Passaro, 1994).

Student Achievement: Florida has defined three levels of student achievement: basic (level 1 and 2), proficient (level 3), and advanced (level 4 and 5) (www.ed.gov/admins).

Sunshine State Standards (SSS): Expectations approved by the State Board of Education in 1996 to increase student achievement in Florida in seven subject areas. School districts design curriculum based on local needs (www.firn.edu/doe/curric).
Significance of the Study

Florida Governor, Jeb Bush, signed Senate Bill 354 and created the Middle Grades Reform Act in 2004 due to the continuation of school reform efforts and the increased focus on educational accountability. There were four main components to the act: (a) middle grades curricula and coursework; (b) rigorous reading requirement; (c) comprehensive reform study on the academic performance of middle grade students and schools; and (d) personalized middle school success plan. Reading was the foundation for the act. Its intention was that middle grade students attended a school with outstanding leadership that supported and engaged them in receiving rigorous academic instruction through challenging curricula that was delivered by highly qualified teachers. To achieve this, reading coaches were put in three-quarters of the middle schools in Florida. Their job was to provide on-site professional development and help teachers teach reading (www.flmmiddlegradesreform).

Educational leaders must acknowledge the impact school culture has on student achievement. The present study was developed to determine the relationships between the cultures of the selected middle schools and student achievement. The findings and data could be used by schools to improve their culture in order to improve the achievement levels of its students.

Research Questions

1. To what extent do middle schools scoring in the top and bottom half on the Modified School Culture Triage Survey differ on: (a) average total years of teaching experience of the faculty; (b) average total years of teaching experience
of the faculty at the present school; (c) ethnic composite of the faculty; and (d)
gender composite of the faculty?

2. What differences, if any, exist between the cultures of middle schools as
measured by the Modified School Culture Triage Survey and student achievement
as measured by the percentage of middle school students scoring at level 3 and
above on the 2004-2005 FCAT reading portion?

3. What relationships, if any, exist among the three key areas of middle school
culture (collaboration, collegiality, and self-determination/efficacy) and student
achievement?

Methodology

Population

The population consisted of 2004-2005 instructional personnel in six of the seven
middle schools in Osceola County School District, Florida that agreed to participate in
the study. A total of 343 instructional personnel participated in this study.

Instrumentation

Data about school culture were obtained from instructional personnel using the
modified version of Wagner and Masden-Copas’ School Culture Triage Survey. The
researcher received permission from the authors to revise the instrument to include
demographic items. The final survey instrument consisted of four sections: (a) five
questions on collaboration; (b) seven questions on collegiality; (c) six questions on
self-determination/efficacy; and (d) six demographic questions. For the first three sections, respondents were asked to rate the extent to which the identified items were present in their school, using a five-point Likert scale (1 = Never; 2 = Rarely; 3 = Sometimes; 4 = Often; 5 = Always). The demographic data were used as variables in the data analysis.

Data about student achievement were obtained from the 2004-2005 FCAT reading scores. Statistical analysis was conducted using the Statistical Package for Social Sciences (SPSS) for Windows Version 11.0.

For Research Question 1, the schools were divided into two groups. The scores obtained from the Modified School Culture Triage Survey divided the groups into the top half and the bottom half. The demographic variables were examined.

For Research Question 2, the schools were divided into two groups based on the percentage of students scoring at level 3 or above on the 2004-2005 FCAT reading portion. A t-test and nested ANOVA was calculated to determine if any significant differences existed between the school culture of the grouped middle schools and the student achievement scores.

For Research Question 3, the schools were divided into two groups based on the percentage of students scoring at level 3 or above on the 2004-2005 FCAT reading portion. A regression analysis determined if any significant relationships existed among scores on the three key areas of school culture (collaboration, collegiality, and self-determination/efficacy) and student achievement.
Collection Procedures and Data Analysis

In order to obtain the data from the instructional personnel at the middle schools, the researcher followed Dillman’s tailored design method, which included up to five contacts. Each contact was personalized. The first contact was a prenotice letter. The second contact was the survey cover letter and survey. The third contact was a follow-up postcard. The fourth contact was another personalized letter and copy of the survey. The fifth and final contact was a final personalized letter and an additional copy of the survey. The first four contacts were done in the individual school with the help of the reading coach, who acted as the contact person for the researcher. The fifth contact was mailed to the home of each non-respondent (Dillman, 2000).

Once the surveys were collected, statistical analysis of the data was conducted using the Statistical Package for Social Sciences (SPSS) for Windows Version 11.0. For Research Question 1, the schools were divided into two groups. The scores obtained from the Modified School Culture Triage Survey divided the groups into the top half and bottom half. The demographic variables were examined. The data were presented in tabular form and discussed.

For Research Question 2, the schools were divided into two groups based on the percentage of students scoring at level 3 or above on the 2004-2005 FCAT reading portion. A t-test and nested ANOVA was calculated to determine if any significant differences existed between the school culture of the grouped middle schools and the student achievement scores.
For Research Question 3, the schools were divided into two groups based on the percentage of students scoring at level 3 or above on the 2004-2005 FCAT reading. A regression analysis determined if any significant relationships existed among scores on the three key areas of school culture (collaboration, collegiality, and self-determination/efficacy) and student achievement.

**Organization of the Study**

Chapter 1 introduced the problem statement and design components. Chapter 2 presents a review of relevant literature regarding the problem in this study. Chapter 3 presents the methodology and procedures used for data collection and analysis. Chapter 4 describes and analyzes the data. Chapter 5 summarizes and discusses the findings of the study, the implications for practice, conclusions, and recommendations for future research.
CHAPTER 2
REVIEW OF LITERATURE

Introduction

A person who moved from school to school sensed that each school was distinctive, unique. The feeling originated from the climate of the school. School climate “captures the atmosphere of a school: it is experienced by teachers and administrators, describes their collective perceptions of routine behavior, and affects their attitudes and behavior in the school” (Hoy, Smith & Sweetland, 2003, p. 38). A school’s climate developed from the school’s culture and impacted many aspects of the school, including student achievement. “Culture refers to the behavioral norms, assumptions, and beliefs of an organization, whereas climate refers to the perceptions of persons in the organization that reflect those norms, assumptions, and beliefs” (Owens, 2001, p. 145). Gonder and Hymes (1994) cited Deal’s definition of climate and culture. Climate was the “short-term, malleable aspects of the school’s physical and psychological environment, and culture refers to the long-term, deeply embedded beliefs of an organization – the ‘feel’ of a school, its myths and its moral code” (p. 6). Wagner and Masden-Copas (2002) described school culture as shared experiences (traditions and celebrations), a sense of community, of family, and team.

Climate and culture were described as an analogy by Bulach and Malone (1994). Climate was the part of an iceberg that was seen above water and culture was the part
below the water. Culture could not be seen and detected, but was a necessary component for climate. Culture variables were openness, trust, collaboration, and environment. It was difficult to know if colleagues trusted, worked together, or cared about each other. Climate variables included order, leadership, expectations, and involvement. They were more readily seen.

Sergiovanni (2000) distinguished between two important worlds of a school. The “lifeworld” included those parts of a school that created meaning, culture, and significance. The “systemsworld” contained the management systems of the school. Both worlds were needed and supported each other. If the systemsworld was dominating, then the school’s goals, purposes, and values were imposed on parents, teachers, and students, rather than created by them. The center position should be occupied by the lifeworld. It was the infrastructure for achieving improved student performance in a caring environment.

Schools are social environments, and educators must attend to the levels of satisfaction and to the levels of productivity, which are outcomes of those environments. At any particular time, the most obvious concerns might be with the morale of students, the job satisfaction of staff members, or the extent to which parents and patrons approve of the school and its programs. These concerns do not mean that there is little concern about student performance, falling test scores, or teacher performance. There can be a simultaneous concern for the development or maintenance of self-esteem and self-reliance on the part of
the students and staff. An environment in which people are happy to study and to work is important (Kelley, 1980, p. 2).

Understanding both school climate and school culture and how they affect attitudes and behavior was crucial to school improvement. Researchers discovered a “missing link” to school improvement (Wagner & Hall-O’Phalen, 1998). The school’s culture was more important than elaborate curriculum alignment projects, scrimmage tests, and the latest buzzword reform efforts. School culture was the overlooked component of school improvement (Peterson & Deal, 1998).

Culture

Wagner and Masden-Copas (2002) described culture as the brace for a bridge, linking previous to future achievement. For high improvement changes, the braces were firm and strong. Schools must first get the culture of the school right before implementing “programs” to raise student achievement.

Culture was viewed from two aspects: content and form by Hargreaves (1994). The content of teacher culture was seen in what teachers thought, said, and did. These actions were based on the shared beliefs, values, and assumptions. Content culture was parallel to a more traditional definition of culture. Form of teacher culture consisted of patterns of relationships and forms of association between members. When the form changed, the content of culture changed. Hargreaves believed that it was the form of culture that was powerful and significant because as relationships changed, the beliefs, values, and assumptions changed.
Organizational culture was shaped and defined by symbols, such as history, stories, myths, heroes, heroines, behavior norms, values, beliefs, traditions, rituals, and ceremonies. The language used, philosophy, and rules of the game also impacted the culture of a school. Culture developed over time and acquired deeper meaning. The elements of an organization’s culture were stable. A level of structural stability in the organization was implied. These various elements were tied together and lie at a deeper level, binding everyone into a coherent whole (Schein, 1995).

Mission and purpose were at the heart of a school’s culture. The mission instilled intangible forces throughout the school and motivated leaders to lead, teachers to teach, and students to learn (Deal & Peterson, 1999).

Several other elements made up a strong culture. The environment in which a school operated determined what it must do to be a success. Values were the basic concepts and beliefs held by the organization were effectively transmitted through stories. Values and beliefs represented foundational understandings (Deal & Kennedy, 1995).

Heroes personified the culture’s values and provided role models for employees to follow. Organizations with strong cultures had many heroes. Some were born, others were “made” by the organization (Deal & Kennedy, 1995).

Student and employee success stories served as inspiration for others and positively reinforced the kinds of accomplishments the organization would like all students and staff to strive toward (Deal & Kennedy, 1995). Stories fostered communities, reinforced culture, and communicated deeply held individual and organizational values (Moxley, 2000).
Storytelling has been an educational tool throughout history. In ancient times and even in some contemporary societies, storytelling provides a means of passing on meaningful learning from person to person, generation to generation, culture to culture. Stories capture events and experiences, and often include a lesson to be learned (McCay, 2003, p. 69)

When choosing stories to share, educational leaders looked for: (a) patterns that examined plots and themes; (b) consequences that determined the causes and effects of choices; (c) lessons that determined what was learned; (d) utility that recalled successes; (e) vulnerability that identified imperfections; (f) future experience that was scripted into a vision and became a scenario of success; and (g) recollections that reviewed the meanings and memories of the past (Kaye & Jacobson, 1999).

Rites, rituals, and ceremonies were the systematic and programmed routines of day-to-day life. They showed employees the kind of behavior that was expected of them and provided visible and strong examples of what the organization stood for (Deal & Kennedy, 1995). Celebrations and rituals fostered connectedness, built community, and helped groups stay connected to core values (Moxley, 2000).

Symbols were powerful in schools. They included any object, art, event, quality, or relation that conveyed meaning and usually represented something else (Fairholm, 1994). Deal and Peterson (1999) identified several symbolic artifacts found in good schools: (a) mission statement; (b) student work; (c) banners to help convey values; (d) display of past achievements through trophies or student accomplishment awards;
(e) historical collections, such as yearbooks; (f) school mascot to represent spirit, teamwork, and community. They discovered that symbols reinforced culture in four ways:

(a) signaled what was important; (b) provided a message of deeper purposes; (c) provided a message of values; and (d) forged pride in the school.

The cultural network was the primary, informal means of communication within the organization. Working the network effectively was the way to get things done or understand what was going on in the organization. It provided opportunities for the organization to show they cared about their employees. It also encouraged a spirit of “oneness” (Deal & Kennedy, 1995).

Strong Cultures versus Weak Cultures

Every school has a culture. It may be fragmented and difficult to read from the outside or it may be very strong and cohesive. In fragmented cultures, loyalties were divided. “Staff openly believed they couldn’t teach children who attended their school…believed it was the students’ and parents’ fault that students didn’t learn…and no longer searched for ways to change their instruction to achieve results” (Deal & Peterson, 1999, p. 120). Deal and Peterson identified eight specific negative roles in toxic schools: (a) saboteurs found ways to sabotage or ruin new ideas, programs, or positive activities; (b) pessimistic storytellers reminded the group of every failure, thereby poisoning the culture and dampening enthusiasm and energy; (c) keepers of the nightmare reduced staff commitment by telling about the problems that developed during past change efforts; (d) negaholics found something negative or unfavorable in any idea
proposed; (e) prima donnas wanted all the attention; (f) space cadets had no idea what was going on; (g) martyrs expected people to see any contribution they made as a tremendous personal sacrifice; and (h) deadwood, driftwood, and ballasts were along for the ride, the glory, and the excitement, but refused to do any work. Often, negative cultures, colleagues, and environments overwhelmed the best teachers. Without a healthy school culture, staff may not be open to professional learning opportunities, thereby decreasing the chances of improving student learning (Wagner & Masden-Copas, 2002).

In cohesive cultures, everyone knew the goals of the organization and worked toward achieving them (Deal & Kennedy, 1995). Common goals and a stable staff permeated the school. Curricular, instructional, order, and discipline were established through consensus. Open and honest communication was encouraged. Staff demonstrated a wealth of humor and trust. Time was set aside for stakeholders to be recognized in celebrations. School and district leaders provided tangible support (Wagner & Masden-Copas, 2002).

A strong culture guided members’ behaviors in two ways: the informal rules spelled out how members were to behave most of the time and enabled members to feel better about what they did, so they would work harder. It bound individuals to the organization and generated loyalty and commitment. Strong cultures removed the degree of uncertainty by providing structure, standards, and a value system to follow (Deal & Kennedy, 1995).

Rosenholtz (1989) differentiated between “moving” and “stuck” schools. In “moving” schools, the culture was cohesive. Teachers shared a common purpose,
worked cooperatively, used peers as resources, viewed themselves as learners, and strived for continuous improvement. On the other hand, “stuck” schools represented a fragmented culture. Teachers felt no progress or growth, had low aspirations and motivation, lacked a sense of community, stayed isolated, had little dialogue with colleagues, and felt frustrated. Whether fragmented or cohesive, culture had a powerful influence in an organization. Culture tied people together, gave meaning and purpose to their lives, and acted as a tool for achieving organizational goals.

Fullan and Hargreaves (1991) described four types of school cultures. On one end of the continuum lied balkanization. In this type of culture, the teacher was the king or queen of his or her classroom. This resulted in a competitive atmosphere because teachers focused on immediate rather than long range issues and worked in isolation implementing traditional practices. Next along the continuum, lied comfortable collaboration, where collaboration was thin and superficial. Teachers shared materials and some instructional strategies, but avoided discussing deeper issues, such as curriculum, long range planning, or their philosophy of education. In contrived collegiality, a third type of culture, there was a façade of formal, explicit bureaucratic policies and procedures and these formal structures were unsupportive of collaborative cultures. On the opposite end of the continuum was collaborative culture. In these cultures, continuous, career learning happened. Teachers showed increased efficacy and confidence in their professional abilities because they welcomed opportunities for continued learning by attending professional development opportunities. Daily practices of team teaching, mentoring, and shared decision-making were emphasized.
Effective and Healthy Schools

A healthy school climate is imbued with positive student, teacher, and administrator interrelationships. Teachers like their colleagues, their school, their job, and their students and they are driven by a quest for academic excellence. They believe in themselves and their students; and set high, but achievable goals. Students work hard and respect others who do well academically. Principal behavior is also positive; that is, it is friendly and supportive. Principals have high expectations for teachers and go out of their way to help teachers. Healthy schools have good relationships with the community (Hoy, Smith & Sweetland, 2003, p. 39).

“A healthy organization is one that not only survives in its environment but continues to grow and prosper over the long term” (Hoy & Tarter, 1997, p. 9). In healthy organizations, goals were achieved and members’ needs satisfied. Teachers expressed like for their colleagues, their school, their job, and their students, and were driven by academic excellence. They set high and achievable goals because they believed in themselves and their students. The learning environment was serious and orderly and the students worked hard. There was agreement on how to do things and what was worth doing (Hoy & Tarter).

School health is its own reward. Healthy people feel good and have the capacity to be productive just as healthy schools can fulfill their mission of being a good place to work and learn. A healthy school is a positive place. The faculty emphasizes academic achievement and sets high and achievable expectations for
the students. Teachers enjoy friendly and supportive relations with each other. Administrators have positive, collegial relationships with the rest of the staff. The principal influences the central office to secure resources and to facilitate school improvement. A healthy school has a strong sense of its own mission and is protected from destructive intrusions from the community (Hoy & Tarter, p. 1).

Saphier and King (1985) identified 12 norms, or elements of school culture, that needed to be strong in order to create a healthy school culture. The norms included: (a) collegiality; (b) experimentation; (c) high expectations; (d) trust and confidence; (e) tangible support; (f) reaching out to the knowledge base; (g) appreciation and recognition; (h) caring, celebration, and humor; (i) involvement in decision making; (j) protection of what is important; (k) traditions; and (l) honest, open communication. Strong norms led to improvements in instruction and increased student achievement. Weak norms resulted in random, infrequent, and slow progress.

Common characteristics were found in effective schools. They were: (a) high expectations for students; (b) student-centeredness; (c) safe and disciplined schools; (d) orderly atmosphere; (e) focused mission; (f) coherent plan; (g) teacher efficacy; (h) frequent monitoring of progress; (i) rewards and incentives for teachers and students; (j) positive physical environment; (k) low sense of futility; and (l) community support. All or some of these characteristics were absent in ineffective schools (Gonder & Hymes, 1994).
Culture Research Instruments

The School Culture Quality Survey

Katzenmeyer (1994) developed The School Culture Quality Survey at the David C. Anchin Center at the University of South Florida. This 36-item questionnaire was divided into four dimensions: (a) shared vision; (b) facilitative leadership; (c) teamwork; and (d) learning community. The Likert scale was used. The survey described a quality workplace where each individual felt respected and valued, genuinely cared about, had goals in mind that all shared, was encouraged to try new things, supported co-workers and was supported by them, was part of a team of people who loved working together, celebrated successes together, viewed problems as opportunities to improve, and everyone was eager to learn and share what he or she had learned.

Denison Organizational Culture Survey

Denison and Neale (1994) created the Denison Organizational Culture Survey. It provided a way to link an organization’s culture to tangible performance measures, including profitability, quality, innovation, market share, sales growth, and employee satisfaction. Based on fifteen years of research, Denison concluded that four traits: (a) involvement; (b) adaptability; (c) consistency; and (d) mission had a significant impact on organizational performance. This survey allowed leaders, stakeholders, and employees to understand the impact culture had on their performance and learn how to redirect their culture to improve effectiveness. The Denison Organizational Culture Survey was a 60-item questionnaire that measured the four traits and twelve management
practices. Once individual surveys were tabulated into a graphic profile, a comparison of higher and lower performing organizations was made. Prescriptive suggestions were written for the organization to improve the organization’s effectiveness.

Self Assessment: School Culture Triage

Wagner and Masden-Copas (2002) developed the Self Assessment: School Culture Triage to conduct a school culture audit. It can be used with individual schools or an entire district. Wagner and Masden-Copas encouraged the use of five steps in conducting a culture audit: (a) interview; (b) observation; (c) survey; (d) evaluation; and (e) presentation. When combined, the information obtained presented a clear picture of the school’s culture. The survey consisted of 17 items, broken down into three components. Five items assessed professional collaboration, six items focused on collegial relationships, and six items assessed self-determination/efficacy. A five response Likert scale was available to choose from, ranging from never to always. The survey provided immediate feedback, was cost effective, and identified strengths and challenges.

Collaboration

In most schools, teachers were colleagues in name only. They worked, planned, and prepared alone. When an instructional, curricular, or management problem arose, teachers struggled on their own to come up with a solution (Inger, 1993).

Some schools were able to foster substantial teacher collaboration because of the significant benefits produced. Collaboration was a great way for instructional
improvement. These approaches yielded high achievement, positive relationships, and psychologically healthy people (Johnson & Johnson, 1989). Inger (1993) found that teachers saw improvements in student achievement, behavior, and attitude. “In schools where teachers work collaboratively, students can sense the program coherence and a consistency of expectations” (p. 1). Collaboration provided for significant and lasting personal growths that lead to substantial organizational change (Christenson & Eldredge, 1996).

Through collaboration, teachers set an example for the students. They demonstrated, by example, that each individual was unique, but important (Howell, 2000). Positive teacher interaction facilitated collaboration in school and impacted the climate of the building, the achievement of individuals within the building, and the morale of those who work within the school. Staff worked collaboratively through informal interactions by showing consideration and appreciation, sharing positive remarks, and showing respect and collegiality (Lyman & Foyle, 1998).

The welfare of the children is intimately bound up with the well-being of the adults who worked with them. If the latter did not feel accepted as people in the staffroom, they would not be fully at ease in the classroom. Besides, it is philosophically inconsistent to treat children as ‘whole’ and ‘individual’ but to ignore the personhood of their teachers (Nias, 1998, p. 1262). Students and teachers prospered when relationships were strong and positive.

“Collaboration doesn’t occur, however, simply by putting together teams of people. Collaboration requires skill development and coaching, and structures that
encourage and invite shared work around common goals” (O’Neill & Conzemius, 2002, p. 17). “Together, teachers have the organizational skills and resources to attempt innovations that would exhaust the energy, skill, or resources of an individual teacher” (Inger, 1993, p. 2). Collaborative approaches provided access to more relevant information and alternative perspectives, promoted reflective practice, helped develop a culture that supported learning and growth, and facilitated change by encouragement.

The principal was a facilitator who enabled others to enter into reflection about teaching and learning (Osterman & Kottkamp, 1993).

What teachers actually did deepened and expanded as levels of integration evolved. Often, the relationship began with teachers learning about one another and asking for or offering help. At the next stage, teachers planned together and shared information about their students and what they taught them. At a more advanced stage, teachers assisted one another with instruction and coordinated instruction between courses (Inger, 1993).

There were many benefits to schools who used teacher collaboration: (a) teachers and administrators got smarter together through formal and informal training, study groups, and conversations centered around teaching; (b) teachers increased their pool of ideas and materials by working together; (c) faculty became more adaptable and self-reliant; and (d) teachers eased the strain of staff turnover by providing assistance to new teachers and socializing all newcomers to the values and traditions (Inger, 1993).

Teacher collaboration was rare. A school’s faculty was made up of entrepreneurial individuals who see each other before the school day begins, between
periods, at lunch, after school, and during their planning period. Teacher autonomy was highly valued, so privacy and non-interference was the norm. Also, some teachers viewed themselves as subject matter specialists. They did not see the importance of subjects other than their own and therefore had no reason for meaningful collaboration with teachers in other departments (Inger, 1993).

Several strategies were noted by Inger (1993) to encourage teacher collaboration. Teacher involvement in the development of goals and objectives was critical. The purpose and anticipated outcomes publicized to students, parents, and the community. Free staff development and unstructured time in a relaxed environment for teachers to share. Teachers shared student work, observed each other, and shared a planning time. Teachers commented that after working together cooperatively, they gained respect for what the others were teaching.

Nias, Southworth and Yeomans (1989) found that in schools that displayed cultures of collaboration, teachers spent a great amount of time talking to each other. The talk centered around themselves and their teaching. The talking helped establish shared meaning. They found three benefits from teacher talk: (a) revealed individuals’ attitudes, values, and beliefs; (b) led to mutual openness because the talk was based on trust; and (c) developed a shared language that allowed complex ideas to be exchanged more easily.

Humor was valuable among teacher talk. It reduced tension, increased relaxations, promoted social cohesion, staff morale, and individual confidence (Nias, Southworth & Campbell, 1992). Jansen (1994) studied humor in educational leadership. The research revealed that principals saw humor as the counterbalance to the seriousness
of education. Humor was a bonding agent, an adhesive, which strengthened relationships and held teams together. The principals also noted the importance of being able to laugh at oneself.

Schools could also harbor non-collaborative cultures. Three types were possible: (a) balkanization; (b) comfortable collaboration; and (c) contrived collegiality. In a balkanized culture, groups competed for power, which led to isolation. There was no sharing of ideas, solutions, and networking of knowledge. The comfortable collaboration was characterized by thin and superficial collaboration among teachers who avoided in-depth discussions of curriculum and shared purpose. In a contrived collegiality culture, there were formal, specific, bureaucratic procedures used to draw attention to joint teaching planning, consultation, and other forms of working together (Fullan & Hargreaves, 1991).

**Collegiality**

Jarzabkowski (2002) defined collegiality as “teachers’ involvement with their peers on any level, be it intellectual, moral, political, social and/or emotional” (p. 2). In this definition, there was a communal aspect. Collaboration on the other hand, denoted teachers working in combination on professional activities. Collaboration was a subset of collegiality, since collegiality encompassed both professional and social/emotional interactions at work.

“A collegial and supportive study group can provide participants a renewed sense of professionalism and empower them to be change agents in their professional settings” (Tichenor & Heins, 2000, p. 319). Social support from colleagues reduced teacher stress
and burnout (Schwarzer & Greenglass, 1999). Nias (1999) also found that teacher burnout could be reduced and values of teachers strengthened due to collegial relations because individuals expressed their emotions, both positive and negative, were able to admit failure and weakness, voiced resentments and frustration, and demonstrated affection. It was determined that when teachers talked and listened to colleagues they respected they gained a lot. “Teachers wanted their colleagues to be sensitive to their emotional needs, to respond with empathy, sympathy, and, occasionally, wise counseling. They were deeply appreciative of opportunities to talk, to share their sense of worthlessness and failure, to relax and above all to laugh” (p. 1260). It was important that the colleagues be easily accessible and non-judgmental.

Four types of collegial relationships were identified by Little (1990) to be found in schools: (a) storytelling and scanning for ideas; (b) aid and assistance; (c) sharing; and (d) joint work. According to Peterson (2002b), joint work provided ample support and complex connections to improve staff relationships and collaborations. Joint work included: (a) designing and preparing materials; (b) designing curriculum units; (c) researching materials and ideas for curriculum; (d) writing curriculum; (e) preparing lesson plans; (f) reviewing and discussing plans; (g) crediting new ideas and programs; (h) persuading others to try an idea; (i) making collective agreements to test an idea; (j) inviting others to observe one’s teaching; (k) analyzing practices and effects; (l) teaching others in informal in-services; (m) teaching others formally; (n) talking publicly about what one is learning; and (o) designing in-services for the school.
First, social interaction may promote better working relationships, which in the longer term may improve the quality of teaching and learning. Second, positive social interaction may improve the emotional health of the staff community, thus reducing emotional stress and burnout. What may appear on the surface to be an immaterial part of a teacher’s workplace experience in terms of educational outcomes should be acknowledged as promoting significant individual and organizational benefits (Jarzabkowski, 2002, p. 1).

Teachers’ responses to what they like about their jobs revolved around their satisfaction with human relationships, both with colleagues and students. “At the root of many relationships is the need to share and enjoy time with others, the need to connect and befriend, and the need to seek professional assistance and camaraderie” (Donaldson, 2001, p. 62). Social rituals, such as birthday celebrations, Friday afternoon drinks, social outings, and special lunches and dinners were times that were used for talking. In between periods, recess, and lunch times were popular too. This time spent together allowed the teachers to connect with the personal side of each other and promoted better working relationships (Jarzabkowski, 2002).

Fenlason and Beehr (1994) referred to two types of social support: instrumental and emotional. Instrumental support was characterized by tangible assistance, such as physical aid, advice, or knowledge on how best to complete tasks. Emotional support was characterized by caring behavior and sympathetic listening.

Teacher collaboration in secondary schools was studied by Inger (1993). He found that there was nothing unique about the exceptional schools, except the amount of
teacher collegiality. Some of the schools were small, some large, some were located in rural areas, others in urban areas. All the schools relied on ordinary budgets. The difference between an exceptional school and ordinary school was organizational.

Teachers benefited from collegiality. It bridged the gap between experienced and beginner teachers by breaking the isolation often felt in the classroom. Collegiality also provided satisfaction to teachers. Complex tasks were more manageable, new ideas stimulated, and curricular and instructional coherence promoted. Enthusiasm was stimulated and end of the year burnout avoided. Teachers were more able to detect and celebrate patterns of accomplishments within the classroom and across the classrooms. By working together, teachers found themselves better equipped on curricular and instructional issues. They gained satisfaction from the development of professional relationships, regardless of the differences in viewpoints and the occasional conflict (Little, 1990).

School-wide collegiality was not built overnight. It required administrative and teacher support. To reach its fullest potential, a group of teachers built a community to support it (Jarzabkowksi, 2002). Schools leaders built collegial environments and increased teachers’ motivation and sense of efficacy by: (a) emphasizing the study of teaching and learning; (b) supporting collaboration among educators through modeling teamwork, providing time for collaborative work, and advocating sharing and peer observations; (c) developing coaching relationships; (d) encouraging and supporting program design; (e) applying principles of adult learning, growth, and development of staff development by creating cultures of collaboration, inquiry, and lifelong learning;
and (f) implementing action research to inform instructional decision-making (Blase & Blase, 2001b). Principals modeled and encouraged collegial practices and provided time and resources to facilitate them. Good leaders put relationships first. They foster connections among teachers (Donaldson, 2001).

Inger (1993) created six dimensions for support of teacher collaboration and collegiality. They were: (a) symbolic endorsements and rewards that value cooperative work; (b) school-level organization of assignments and leadership; (c) teachers influence crucial matters; (d) time; (e) training and assistance; and (f) material support. The principal conveyed the message that interdisciplinary teams made the school better for students. Leadership was broadly distributed among teachers and administrators. Teachers were given the latitude to make decisions in the crucial areas of curriculum, materials selection, student assignments, instructional grouping, and assessment. The master schedule reflected time to enhance opportunities for collaborative work, including common planning periods, regularly scheduled team meetings, and release time. Professional development opportunities were offered and there were quality reference texts and other support available.

When schools were organized and supported collegiality, the advantages were plentiful and varied. Such an environment produced greater coherence and equipped teachers and the school for steady improvement. The school became an environment for learning to teach (Inger, 1993).
**Self-Determination/Efficacy**

Teacher efficacy has been defined as “teachers’ belief or conviction that they can influence how well students learn, even those who may be difficult or unmotivated” (Guskey & Passaro, 1994, p. 630). Tschannen-Moran, Hoy and Hoy (1998) described teacher efficacy as the teacher’s belief in his or her ability to successfully accomplish a specific teaching task. A teacher’s sense of efficacy affected their behavior in the classroom, including their effort, goals, and level of aspiration. Teachers with high levels of efficacy believed they could control and/or strongly influence student achievement and motivation. They were open to new ideas and more willing to experiment with new methods to better meet the needs of their students (Guskey, 1988). They also showed a greater enthusiasm and commitment for teaching (Allinder, 1994).

Rotter (1966) wrote about internal versus external control of reinforcement. External control was demonstrated by teachers who agreed that the environment overwhelmed their ability to impact a student’s learning. They believed that reinforcement of their teaching efforts was outside their control. On the other hand, internal control teachers expressed confidence in their ability to teach difficult or unmotivated students and believed that reinforcement of teaching activities lied within their control. These findings sparked the interest of the Rand Corporation to conduct studies on efficacy.

The Rand Corporation studied various reading programs and interventions. The study began with two items. Rand item one, general teaching efficacy (GTE), focused on teachers’ beliefs about the power of external factors compared to the influence of
teachers and the school. Rand item two, personal teaching efficacy (PTE), was more specific and individual. The sum of the two items was called teacher efficacy (TE). This revealed the extent to which a teacher believed that student motivation and learning were in the hands of the teacher (Ashton, Olejnok, Crocker & McAuliffe, 1982).

Many school variables were related to a teacher’s sense of efficacy. Among those variables were the climate of the school, the behavior of the principal, whether there was a sense of school community, and what decision-making structures were in place. Gibson and Dembo (1984) found that teachers who perceived a positive school atmosphere had greater PTE, higher GTE and a strong press for academic achievement. They also found that teachers with a higher sense of efficacy, defined as those with high scores on both the PTE and GTE, were less likely to criticize a student following an incorrect response and more likely to persist with a student in a failure situation. High efficacy teachers were more likely to use small group instruction rather than whole class. The High School and Beyond data were used by Lee, Dedick and Smith (1991) to find that a school’s sense of community was the single best predictor of teachers’ sense of efficacy. PTE was linked to instructional experimentation. Teachers were willing to try a variety of materials and approaches to find better ways of teaching. GTE was linked to clarity and enthusiasm in teaching (Allinder, 1994). Woolfolk, Rosoff and Hoy (1990) linked teacher efficacy to shaping students’ attitudes toward school, the subject matter taught, and the teacher, as well as student achievement. They found that the stronger the GTE, the greater a student’s interest in school and the more students perceived that what
they were learning was important. Teachers with a strong PTE had more positive evaluations from the students.

The principal’s leadership was also linked to teacher efficacy. Teachers who felt their principals were influential with superiors in the district had higher PTE (Hoy & Woolfolk, 1993). Lee et al. (1991) found higher sense of efficacy among teachers when the principals used their leadership to provide resources to teachers, allowed teachers flexibility in the classroom, and student misconduct was kept to a minimum. When the principal modeled appropriate behaviors, rewarded performance, and inspired a common sense of purpose, both PTE and GTE were higher (Hipp & Bredeson, 1995).

Teachers who felt they influenced school-based decision-making had a stronger PTE, while teachers who felt they had greater freedom to make decisions that affected their classroom had greater GTE (Moore & Esselman, 1992). Four school factors were found to be significantly associated with teacher efficacy: (a) receiving positive feedback on teacher performance; (b) collaboration with other teachers; (c) parent involvement; and (d) school-wide coordination of student behavior (Rosenholtz, 1989).

Bandura (1997) defined self-efficacy as “beliefs in one’s capabilities to organize and execute the courses of action required to produce given attainments” (p. 3). This was a belief about the level of competence a person expected to display in a given situation. Self-efficacy beliefs influenced thought patterns and emotions.

Four sources of efficacy were found by Bandura (1997): (a) mastery experiences; (b) physiological and emotional states; (c) vicarious experiences; and (d) social persuasion. Mastery experiences were the most powerful because belief that the
performance was successful raised efficacy. The physiological and emotion state of the teacher had impact also. If a teacher thought the performance was a failure, efficacy would be lowered. Also, efficacy was determined by whether the teacher thought the success was internal, he or she controlled it, or external, just lucky. Internal success enhanced self-efficacy. Vicarious experiences were skills modeled by someone else. The degree to which the observer identified with the model determined efficacy. The more closely the observer identified with the model, the stronger the impact on efficacy. When the model performed well, the efficacy of the observer was enhanced. Social persuasion entailed specific performance feedback from a colleague or supervisor. It contributed to successful performances in that a boost in self-efficacy led a person to initiate a task, attempt new strategies, or try hard to succeed. The degree to which the feedback boosted self-efficacy depended upon the credibility, trustworthiness, and expertise of the person.

Ashton (1985) interviewed teachers and found factors that contributed to lowering teacher efficacy. They included: (a) excessive role demands; (b) poor morale; (c) inadequate salaries; (d) low status; (e) lack of recognition; (f) professional isolation; (g) uncertainty; and (h) alienation. Low efficacy led to less effort and giving up easily, which led to poor teaching, which then decreased efficacy even further. According to Tschannen-Moran et al. (1998) the opposite was also true. Greater efficacy led to greater effort and persistence, which led to better performance, which led to increasing efficacy.

Teachers’ sense of efficacy was undermined in schools where talk focused on the insurmountable difficulties of educating their students. On the other hand, where
teachers worked together to find ways of addressing learning, motivation, and behavior problems of their students, teachers’ feelings of efficacy were enhanced (Tschannen-Moran, et al., 1998). The stronger the teacher’s collective beliefs in their instructional efficacy, the better academic performance of the school (Bandura, 1997). The principal increased the collective sense of efficacy by displaying strong leadership, encouraging innovation, and responding to teachers concerns (Fuller & Izu, 1986).

A low sense of efficacy was contagious to the school and created a demoralizing cycle of failure. Low teacher efficacy led to low student efficacy and low academic achievement, which lowered teacher efficacy even further (Bandura, 1997). To reverse this cycle and create a cohesive culture, the environment must be orderly, with a strong press for academic achievement, administrators were responsive to teachers’ concerns and encouraged them to try new ideas, and teachers encouraged colleagues to address student needs. As academic achievement improved, efficacy was enhanced, which then furthered student achievement (Hoy & Sabo, 1997).

Once efficacy beliefs were established, they were resistant to change. “Compelling evidence” must intrude and cause them to be reevaluated. Therefore, teachers must be helped in developing strong efficacy beliefs early in their career (Bandura, 1997). Strong efficacy led to higher motivation, greater effort, and persistence (Tschannen-Moran et al., 1998).

A variety of resources were identified to strengthen a teacher’s sense of efficacy. Mastery experiences improved teachers’ efficacy, especially when success was achieved on difficult tasks with little assistance or when success was achieved early. Physiological
and emotional cues improved performance when moderate levels of arousal helped teachers focus their attention and energy on the task. Vicarious experiences, observing skilled and credible models, and verbal persuasion provided information about teaching, gave encouragement and strategies for overcoming obstacles, and provided feedback about a teacher’s performance (Tschannen-Moran, et al., 1998).

**Culture Change**

In order for long-term school improvement to be successful, change occurred in the culture of the school.

Creating a collaborative culture has been described as ‘the single most important factor’ for successful school improvement initiatives, ‘the first order of business’ for those seeking to enhance their schools’ effectiveness, an essential requirement of improving schools, the critical element in reform efforts, and the most promising strategy for sustained, substantive school improvement (DuFour, 2001, p. 15).

Because culture was the deep beliefs of the organization, it must be shaped to support change efforts. The principal developed a culture that supported risk-taking and innovation (Gonder & Hymes, 1994).

As cited in Gonder and Hymes (1994), Lezotte and Jacoby stated, “the ultimate purpose of the school improvement process is to affect student learning by changing the culture of the school” (p. 43). They acknowledged that cultural change takes time, occurred in a ‘million little actions’, and was incremental.
Communication was vital. For change to be successful, “school leaders must mobilize all channels of communication – verbal, nonverbal, symbolic, and written – to transmit messages that will inform, inspire, and persuade students, staff, and the community” (Gonder & Hymes, 1994, p. 111). Communication was planned and systematic in order to ensure ongoing communication with the school and the public. The communication was two-way, meaning mechanisms were in place to receive feedback from the public. It was important that the school work effectively and build understanding, both internally and externally. Finally, communication was open and honest. Credibility was a precious commodity that took time to build.

Change happened in healthy and open organizations and had direction (Hoy & Tarter, 1997). Schools were learning organization, places where “people continually expand their capacity to create the results that they truly desire, where new and expansive patterns of thinking are nurtured, where collective aspiration is set free, and where people are continually learning how to learn” (Senge, 1990, p. 3). The process of building school culture transformed the school into a learning organization.

Processes of Change

One recommendation for changing the school culture used an organizational development approach. This approach had teachers and administrators working towards making the organization more productive by first recognizing difficulties and then taking responsibility for the solution. The seven steps to the organizational development approach were: (a) identifying the problem; (b) establishing a problem-solving team;
(c) having the team take on the problem; (d) diagnosing the problem; (e) developing an action plan; (f) implementing the action plan; and (g) evaluating the plan. Teachers participated in the decision-making and organizational problem solving. To get teachers interested and involved, a workshop was used. First, teachers were made aware of the ideas of a healthy and open environment, using data from their school. Next, they looked at a profile of their own school. Open conversations regarding discrepancies took place, eventually leading to consensus on the causes. Then, teachers and administrators worked together to develop a realistic, attainable plan. Another approach was to ask for volunteers from each department, ensuring that each department was represented, without overrepresentation. Once the causes of the problems were diagnosed, teams were made to analyze a problem area and recommend a solution (Hoy & Tarter, 1997).

The opportunity for resistance to change experienced by new leadership in a school was acknowledged in Bulach’s (2001) research. A leader who entered the school and wanted to make changes was in for a struggle because the system would resist. To be successful and minimize the struggle, the leader first identified the existing culture and reshaped it, using a four-step process.

Bulach (2001) identified step one as “the expectations diagnosis” (p. 48). Staff members were asked to write down three expectations they had of the principal on separate index cards. The cards were sorted and the top ten to fifteen frequently mentioned expectations shared with the faculty. Staff members then ranked the list from most to least important. A culture that was once hidden was now shared. The leader now knew what the faculty expected from his or her leadership and by what rules and
expectations the faculty wished to be governed. By knowing the faculty’s expectations, there was a subtle shift in power. Now, the leader was able to use moral power to enforce the rules. Moral power was described as having others do what they were supposed to do because it was the right thing to do (Sergiovanni & Starratt, 1998).

Step one was critical in reshaping the culture because it was the start of building a trusting relationship between the faculty and the leader. Trust was a critical element to develop open and healthy school environments. It enhanced interpersonal relationships by creating and sustaining communication, thus improving organizational effectiveness. The leader demonstrated his or her care by listening to the faculty’s opinions, beliefs, and values. Also, the message was conveyed to the faculty that the leader was willing to change his or her leadership style to best meet the expectations of the faculty (Bulach, 2001).

Bulach’s (2001) step two was the same as step one, but the teachers gave the students the index cards so they could write down three rules that should govern behavior in the classroom. Again, there was a power shift because the teacher was enforcing students’ rules.

After about six to eight weeks, step three was implemented. The leader must find out how the faculty was responding to the leadership and make adjustments as needed. Faculty wrote down how the principal was doing a good job and how he or she could do a better job. This feedback allowed the principal to build on his or her strengths and address those things that needed to be changed (Bulach, 2001).
Step four was to assess the culture of the school four to six weeks before the end of school. This could be done formally or informally. Faculty should be asked why they liked working at the school and what would make them like working there even more. The data should be analyzed and a plan developed for the upcoming school year (Bulach, 2001).

Lezotte and Jacoby, cited in Gonder and Hymes (1994), described another change process. The nine ‘strategic assumptions’ must be embraced by all stakeholders in order to change the culture: (a) all schools primary focus would be teaching for learning; (b) schools would be held accountable for measurable results or practical student outcomes; (c) educational equity would receive increasing emphasis; (d) decentralized decision making would be used; (e) collaboration and staff empowerment must increase; (f) teachers would be responsible for student learning; (g) technology would be used to monitor effectiveness of instruction; (h) administrators would demonstrate skills as efficient managers and effective visionary leaders; and (i) by emphasizing student outcomes, schools would be able to loosen the prescriptions of the teaching process, leading to school restructuring. These nine assumptions were the underlining of a five stage change process.

Lezotte and Jacoby’s five stages were discrete, but did not build upon one another. Stage one was preparation. In this stage, the process was introduced and consensus determined that change was needed. It was important to involve staff, students, parents, and the community (Gonder & Hymes, 1994).
Stage two was focus. Agreement was reached on the mission of the school and the student outcomes to be reached. The mission statement provided a focus for the school (Gonder & Hymes, 1994).

Stage three was diagnosis/interpretation. This stage required that current student outcomes were studied and it was decided upon what organizational changes were needed to make improvements. The quality standard assured an overall high level of achievement in the school. The equity standard assured that the high achievement did not vary significantly by race, gender, and socioeconomic status of the school’s student population. Analysis of the data identified the problem, not the solution. The analysis of the student population should not be limited to test scores. Other factors to look at included: conduct reports, participation in activities, attendance, awards, homework completion, surveys, retention percentage, course selection, and grade average (Gonder & Hymes, 1994).

Stage four was plan development. Specific objectives and strategies were agreed upon and prioritized. The list should be kept to a “manageable number”, three to five. The entire staff should be involved in prioritizing the list (Gonder & Hymes, 1994).

Stage five was implementation/evaluation. All staff was trained, new cultural norms were created to sustain change, and the programs were monitored and evaluated. One important new cultural norm for schools to adopt was that the school and its staff could always be better. Improvement was a continuous process (Gonder & Hymes, 1994).
Gonder and Hymes’ (1994) change strategy required the principal to read the culture of the school as the first step to be done. By doing this, the cultural norms were revealed and the principal decided which were good and should be nurtured, what was needed for school improvement, and whether the staff and community agreed that changes were needed. If agreement was not present, the principal focused on achieving agreement to avoid conflict. To read the culture, the principal watched, listened, interpreted, and used his or her intuition. He or she studied the school’s past by looking at key events and individuals that shaped the assumptions, norms, and values held by staff and students. The principal spent time with key individuals in the school to find out what was happening below the surface. These people included priests, storytellers, gossips, spies, and moles. Priests were highly regarded individuals, long-time members who administered to the needs of the school. Storytellers recreated the past and brought life to the environment through tales. Gossips kept everyone current on important and trivial items. Spies and moles informally negotiated and mediated (Deal & Kennedy, 1999).

The second step in implementing change was for the principal to shape the culture once he or she understood it. Deal and Kennedy (1999) described five roles the principals must assume: (a) symbol – affirmed values through the way behave, dress, and spend time; (b) potter – shaped and be shaped by the school’s heroes, rituals, ceremonies, and symbols; (c) poet – reinforced values and sustained school’s best image through the use of his/her language; (d) actor – improvised in the school’s inevitable dramas; and (e) healer – guided the school through transitions and changes.
According to Goldman, Dunlap and Conley (1993) principals displayed the following behaviors for experimentation and fundamental change to occur in schools: (a) manifest a clear sense of purpose linked to school’s vision; (b) use data to make informed decisions; (c) allocate resources consistent with school’s vision; (d) help create new decision-making structures where needed; and (e) become more involved in indirect supporting roles for teachers and less involved in direct leadership activities.

**Strategies for Improving a School’s Culture**

To successfully change the culture, attitudinal and behavioral changes were made. Several factors helped improve the culture of a school: (a) sense of direction; (b) attitude of principal; (c) positive board support; (d) consistency and credibility; (e) positive, knowledgeable, energetic, and communicative leaders; (f) removing fear and regarding risk taking; (g) positive, honest exchange of ideas; (h) integrity; (i) trust; (j) teacher empowerment; (k) leadership teams working on exciting, clear goals for student success; (l) allowing time for staff to identify, discuss, and internalize mission, beliefs, and goals of the school; (m) good teacher negotiation sessions; (n) collaboration of individual groups; (o) empowering the students; (p) feeling of involvement; (q) missions and goals tuned into by community; (r) adequate funding; (s) unified common goals of teaching staff; (t) addressing problems; and (u) communicating about problems (Gonder & Hymes, 1994).
Planned Induction Programs

“Organizations that provide planned induction programs for new employees increase the chances that those employees will obtain accurate information about the job and the organization and that they will be more satisfied and productive as a result” (Seyfarth, 2002, p. 105). Induction programs served five purposes: (a) improve teacher effectiveness; (b) provide support and assistance to encourage new teachers to remain in teaching; (c) promote professional and personal well-being of new teachers; (d) communicate district and school cultures; and (e) satisfy state mandates. The first year of teaching was an important time. Appropriate behaviors, unwritten values, norms, and procedures were learned.

Types of induction programs varied, but good induction programs included time to talk about and celebrate the school’s mission, values, heroes, and heroines. “By sharing stories, new teachers are ‘stitched into the cultural fabric of the school’, while the veterans are ‘reminded why they joined this enterprise in the beginning’” (Pardini, 2002, p. 24). An orientation program introduced new teachers to the school and community. Information was provided about the district, performance expectations were explained, and emotional support was provided. Performance improvement programs covered some of the material from the orientation program, and expanded to help new members learn the culture of the school. Participants usually received individualized assistance with their teaching from an administrator or another teacher. Mentor teachers helped new teachers become comfortable in their environment and learn their jobs. They assisted
new teachers in understanding the school’s culture, including written and unwritten rules and norms (Seyfarth, 2002).

Johnson and Kardos (2002) studied new teachers and the assistance they received. The researchers asked about the interactions they had with their colleagues and their principals. They concluded that three types of professional cultures were encountered by new teachers: (a) veteran-oriented; (b) novice-oriented; and (c) integrated professional. In the veteran-oriented culture, schools had a large percentage of well-established, independent teacher practices. New teachers were not inducted into the professional life of the school. The novice-oriented culture had two categories of schools: start-up charter schools staffed with new, inexperienced teachers and urban schools that experienced high turnover as teachers left for a better work environment. In these schools, energy was high, but there was little professional guidance about how to teach. Integrated professional culture schools encouraged collaboration and ongoing professional exchanges. Veteran and novice teachers were not kept apart. Instead, teamwork and camaraderie were encouraged.

Parent Involvement

“A school’s reputation is a combination of actual strengths of the instructional program, student achievement, and the perception the community has about that school” (Gonder & Hymes, 1994, p. 91). Enlisting parents as partners in setting and reinforcing cultural norms that promoted good attendance and achievement helped principals bring about more effective change. Schools needed to make an effort to reach out in positive, individual ways to parents, especially since the bulk of contacts from the school were
negative. Also, schools needed to make parents feel welcome by having parent centers and evening programs. Greater communication between home and school, through regular notices sent home, good news phone calls, and increased positive contacts, improved the culture.

Teamwork

The culture of a school could be improved when the staff worked as a team. “A shared and cohesive culture, rather than a clear, well-defined structure, was the real invisible force that gave the teams its drive” (Bolman & Deal, 1997, p. 252). Team members needed to agree on the mission, values, and goals for achieving success. “When members make such a commitment to move toward the same goal, energy is directed and the group creates a synergy – a force greater than the combined energy of its individual members” (Zoglio, 1993, p. 1). Commitment was higher when members knew the purpose, how that purpose impacted the organization’s success, and how it fit in with a personal vision of success. A school mission statement that correlated to the district mission statement should be developed and kept visible. Once the mission was clarified, the team was able to decide on measurable goals and objectives. Feedback was important so members knew how much progress was being made toward group goals. Individuals needed to know the impact of their efforts in order to continue investing energy. It was important to celebrate successes, no matter how small, because it enhanced confidence in team goals and provided evidence that efforts were paying off. Possible celebrations included a pizza party at work, cake, “we did it” buttons, mugs, congratulations announcements on bulletin boards, and/or banners in the workplace.
“With balanced contribution a team can tap the wide range of ideas and talents present in a group and protect itself from member burnout. If the same few people do most of the work, initiate most of the ideas, and assume most of the leadership, a team risks member turnover or an even more threatening condition – member turnoff” (Zoglio, 1993, p. 21). To avoid this, members must feel part of the team so they want to contribute. The more they contributed, the more they felt part of the team. To increase feelings of belonging, all members should be kept informed, input asked from everyone, and the atmosphere of collegiality increased. To be asked for ideas, to be included in decision-making, and be respected for experience added quality to the work environment.

Communication must be friendly, open, and positive so teams were productive and members felt satisfied. Members said what they thought, asked for help, and shared ideas. This created an atmosphere where team members showed concern for one another, trusted one another, and looked for positive solutions. “When team members ask each other about their lives outside of work, respect individual differences, share jokes, and generally make each other feel welcome, they are creating an environment necessary for group cohesiveness” (Zoglio, 1993, p. 35). Members’ talk focused on solutions, not problems and what they liked and appreciated, not what they disliked. Positive communication that emphasized what was right, while directing energy toward making things better, kept morale high.

The team concept stressed employee involvement and was vital to culture building. “Teaming leads to a collaborative community, greater productivity and a sense
of fulfillment among the people of a unit, department, company or organization” (Smith & Lindsay, 2001, p. 70). As a school’s culture improved, teams determined the staff development needs and the degree to which professional development was accepted.

**Impact on a School**

Building a positive culture must be a priority in schools because it does not happen by accident. Planning, work, and leadership were needed to produce a favorable school culture. In such an environment, students, teachers, administrators, and parents functioned cooperatively and productively. Everyone focused on school goals, student outcomes, and personal relationships. People were engaged and enthusiastic about achieving individual and group goals and were willing to put in the extra effort necessary.

**Student Achievement**

Environments displayed patterns, practices, and conditions that either enhanced or impeded the attainment of satisfaction and productivity. Schools that were able to attain high levels of student outcomes had faculties who accepted the schools’ objectives, were committed to high expectations for students and student achievement, and accepted responsibility for achieving goals. Schools with low or declining levels of student achievement were characterized by complacency and acceptance of things as they were (Kelley, 1980).

The wealth of a school district does not matter. It was the school culture that made a difference in student achievement because there was increased faculty
commitment, faculty trust, and eventually increased student achievement. Students achieved in healthy schools because of the school environment (Hoy & Tarter, 1997).

Cunningham (2003) studied the relationship of elementary school cultures to student achievement in Orange County Public Schools, Orlando, Florida. She administered a modified version of the Wagner and Masden-Copas School Culture Triage Survey, named the School Culture Survey, to 102 elementary schools, surveying all elementary teachers. After three mailings, 61 sets of survey instruments (60.4%) were returned. Individual surveys that were used totaled 1,392. Schools were grouped into the top 33%, middle 33%, and bottom 33% based on the results of the survey. The researcher used 4th grade Florida Comprehensive Assessment Test (FCAT) reading scores at level 3 and above to measure student achievement. She found that schools scoring in the top third on the School Culture Survey had a higher percentage of students scoring at level 3 and above.

Role of the Principal

Leaders needed to expend energy on relationship-building activities. “We learn the affirmative qualities of colleagues by being with them – in business and social contexts both – and experiencing their optimism, humor, and buoyancy” (Donaldson, 2001, p. 58). Teachers needed plenty of opportunities to get to know one another informally if a trusting, open, and affirmative environment was to be created.

Effective leaders served as models. They symbolized the group’s unity and identity and retold stories that carried shared meaning. Effective educational leaders
spent time communicating the school’s philosophy to staff members. They worked toward maintaining a balance between autonomy and control. Staff member’s achievements were recognized regularly. The actions created a strong bond between the school and its staff members and productivity increased (Gardner, 1995).

In a positive cultured school, a transformation occurred in the role of the principal. He or she worked toward building a school of shared governance. Principals who were successful in sharing governance granted professional autonomy, especially in instructional matters, used proactive strategies, involved groups in school-wide decisions, provided opportunities for professional development, and demonstrated integrity. These methods made teachers feel satisfied, motivated, and confident. Teachers wanted to work harder (Blase & Kirby, 2000).

A principal’s number one responsibility was to focus on instruction. It was discovered that principals who utilized shared governance “see themselves as academic leaders, they are invested in instructional matters, and consider all teachers as leaders and themselves as colleague-teachers” (Blase & Blase, 2001a, p. 153). The following factors helped maintain a focus on instruction: (a) clear, shared vision; (b) use of action research; (c) strong leadership among faculty in curriculum; (d) committees with instructional focus; (e) effective discipline policies; (f) effective instructional programs; (g) continuous evaluation and assessment; (h) collaboration among faculty; and (i) collaboration with parents.

Research strongly supported that the leadership of the school principal impacted directly on the culture of the school. “Good happenings in schools depend to a great
extent on the quality of school leadership” (Norton, 2003, p. 50). Educational leaders had little ability to alter the motivations of individuals, but they had considerable latitude to alter the organizational environment. Principals must “select, construct, adjust, or modify environmental conditions in ways which lead to increased productivity and satisfaction for human beings who act within those environments” (Kelley, 1980, p. 18).

Administrators wanted to coordinate and influence the behavior of people to achieve the goals of the school. The leader developed a vision and articulated it to the school community. “It is through vision that a leader can mobilize students and staff to believe in themselves, to be excited about their work, and to strive for excellence” (Gonder & Hymes, 1994, p. 28). He or she also had insight into the culture of the school. This allowed for the determination of which values and assumptions needed to be reinforced and which should be changed in order for the organization to meet its goals.

Probably the most important – and the most difficult – job of an instructional leader is to change the prevailing culture of a school…A school’s culture has far more influence on life and learning in the school house than the president of the country, the state department of education, the superintendent, the school board, or even the principal, teachers, and parents can ever have (Barth, 2002, p. 6).

School leaders were the key to building positive culture and eliminating toxic culture.

Schools exemplified strong, positive cultures through shared sense of purpose among staff members; through the shared understanding of collegiality, improvement, and work ethic; through the shared experiences, rituals, and ceremonies of student achievement, teacher success, and parental involvement; and through the informal
network of storytellers, heroes and heroines who provide socialization, information, support, and history (Peterson & Deal, 1998).

Deal and Peterson (1999) identified that schools leaders helped the culture of the school with eight symbolic roles: (a) historian; (b) anthropological sleuth; (c) visionary; (d) symbol; (e) potter; (f) poet; (g) actor; and (h) healer. A historian “seeks to understand the social and normative past of the school” (Deal & Peterson, p. 87). This was accomplished by probing into the past and keeping track of past and present significant events. He or she constructed a timeline of events, circumstances, and key players. Glancing back at a school’s triumphs and tragedies were necessary to have a vision of the future (Bolman & Deal, 2002). The anthropological sleuth “analyzes and probes for the current set of norms, values, and beliefs that define the current culture” (p. 87). The leader must discover the underlying meanings in the culture by listening to the daily conversations throughout the school and interpreting the daily activities. A visionary defined the systems of beliefs and language that gave the organization focus and coherence (Fairholm, 1994). He or she constantly refocused and refined the school’s purpose and mission, listened to and shared hopes, dreams, and expectations of the school. A shared vision motivated students, staff, and the community. School leaders’ behaviors served as symbols and helped shape the culture of school. As potters, school leaders shaped the culture by: (a) infusing shared values and beliefs into every aspect of the culture; (b) observing rituals as a means of constructing and maintaining community spirit; (c) perpetuating meaningful and valuable ceremonies and traditions; and
(d) celebrating heroes and heroines, recognizing individuals for best practices and outstanding service. Leaders were poets when they communicated with language, words, and images that conveyed powerful messages. What was important was emphasized through memos, letters, and stories. Schools were seen as theaters and the school leader was an actor. The school community expected the theater of the school to be entertaining, challenging, and expressing appropriate values. The school leader acted as a healer by easing transitions, managing changes, healing wounds created, and helping the school community adapt (Deal & Peterson).

Positive, successful school culture administrators worked towards applying these 11 characteristics. They included: (a) a mission focused on student and teacher learning; (b) a rich sense of history and purpose; (c) core values of collegiality, performance, and improvement that engendered quality, achievement, and learning for all; (d) positive beliefs about students and staff potential to learn and grow; (e) a strong professional community that used knowledge, experience, and research to improve practices; (f) an informal network that fostered positive communication flow; (g) shared leadership that balanced continuity and improvement; (h) rituals and ceremonies that reinforced core cultural values; (i) a physical environment that symbolized joy and pride; and (j) a widely shared sense of respect and caring for all. Positive cultures were energizing for all (Deal & Peterson, 1999).

Principal effectiveness had generally been perceived related to the degree the principal’s leadership behaviors impacted teachers’ professional growth (Dufour & Berkey, 1995). Behaviors such as modeling, inspiring group purpose, holding high
expectations, and being supportive were delineated as principal leadership behaviors that improved teacher performance in the classroom as well as participation in the school culture. The effectiveness of the principal balanced the combination of a capacity to develop structures and building consideration that impacted teacher performance (Leithwood, 1990).

Harris and Lowery (2002) organized a study to survey 123 teachers enrolled in a principal preparation program. The teachers represented all grade levels, kindergarten through twelfth. They asked the teachers to reflect on principal behaviors they observed and describe the most effective thing the principal did for students to contribute to a positive school climate. Three themes emerged: respecting students, communicating with students, and supporting students. The teachers noted that principals showed respect for students by treating them fairly and equally. Effective principals communicated with students by talking to and listening to them in order to learn more about them, interacted with students between classes or as they entered and left the school, followed through on their concerns, and sent personalized birthday cards and notes recognizing student achievement. To support students, principals were accessible, rewarded them with praise, extended lunch time or let them eat outside, advocated for them, and provided a safe learning environment.

For the staff, effective principals promoted cohesiveness by providing support and understanding to the staff. This was achieved with an open door policy and remaining visible. The principal also modeled exemplary behavior and promoted the school’s vision in order to bind the staff together (Gonder & Hymes, 1994).
Also, involving teachers in critical decisions communicated that they had valuable ideas to contribute (Gonder & Hymes, 1994). Principals had good human relations skills. This allowed them to make staff and students feel valued and parents feel welcomed.

Since the principal was the instructional leader, he or she needed a strong knowledge base of teaching methods and how children learn. Teachers were encouraged to expand their teaching strategies to best meet the needs of the increasingly diverse group of children (Gonder & Hymes, 1994).

Leaders must be concerned with how participants were socialized into the organization, meaning how they developed perceptions, values, and concerns regarding the organization. It was the result of a complex learning process that was only partially influenced by leader behavior. Schein (1995) defined culture as a pattern of shared basic assumptions that the group learned as it solved its problems of external adaptation and internal integration, that has worked well enough to be considered valid and therefore, to be taught to new members as the correct way to perceive, think, and feel in relations to those problems (p. 279).

The important elements of culture were revealed to members as they gained permanent status and were allowed to enter the inner circles of the group, where secrets were shared. A newcomer tried to understand the perceptions and feelings that arose in critical situations by observing and interviewing regular members and old-timers.
A Model of Shared Governance

An overhaul of the education system was demanded in 1982 after A Nation At Risk was reported. This second wave of educational reform emphasized teacher empowerment, involvement of teachers in decision-making, and shared governance.

In an organization that practiced shared governance, teachers were empowered. They controlled and influenced events that affected them. This empowerment went beyond being involved in decision-making. It involved allowing teachers to act as knowledgeable professionals. For this to occur, the principal trusted and respected teachers, promoted staff development, supported teachers’ decisions, and allocated time for the development of collaborative relationships among teachers (Blase & Blase, 2001a).

Empowered schools were educational communities. These communities nourished the voices of all their members, provided contexts in which people spoke, listened, learned, and grew in order to move on to better ideas. Such learning communities created cultures in which all members were listened to and respected. They were places in which teachers, but not only teachers, had a voice in decision-making and continuously looked at themselves and their schools. In order to do this, many transformations took place, including the hierarchy of decision-making, the structure of the school day, and the interaction with colleagues and students (Kreisberg, 1992).

Blase and Blase (2001a) identified 14 “best practices” for initiating shared governance structures and empowering teachers. They were: (a) assessing faculty and staff’s readiness; (b) actively participating as an equal; (c) being enthusiastic;
(d) ensuring inclusion; (e) providing opportunities to meet; (f) promoting classroom instruction; (g) being flexible; (h) supporting voluntary participation; (i) building trust; (j) protecting the integrity of decisions and surrendering power; (k) encouraging team spirit; (l) supporting risk; (m) encouraging a problem-solving approach; and (n) challenging the status quo. It was important that while principals initiated these behaviors, they also kept in mind the uniqueness of their school.

Teacher Empowerment

Successful principal leadership achieved teacher empowerment. Empowering leaders demonstrated the following behaviors: (a) articulated a vision; (b) provided teacher recognition; (c) were visible and decisive; (d) supported shared decision-making; (e) demonstrated trust; (f) expanded teachers’ knowledge; and (g) allowed time for reflection (Blase & Blase, 2001a).

Educational leaders shared power with teachers, rather than held it over them. By sharing power, teachers’ great potential were released, thereby improving the school and increasing student achievement. Principals tapped into teachers’ expertise and experience to facilitate enlightened decisions and build better educational programs (Blase & Blase, 2001a).

The principal’s leadership for teacher empowerment through the use of shared governance offered many positive effects. Teacher reflection was enhanced. Through reflection, teachers modified their teaching in response to student needs. Principals contributed to teacher reflection by: (a) giving “freedom to think”; (b) recognizing the value of thinking; (c) expressing confidence in independent thought; (d) providing
opportunities to implement thinking; (e) granting responsibility for teachers’ thinking and action; and (f) encouraging sharing, discussing, and debating ideas. Other positive effects included: teachers developing a deeper commitment to being involved in dealing with school-wide problems, an increase in teacher motivation, sense of team, ownership, and sense of professionalism (Blase & Blase, 2001a).

Trust

Trust was a critical element that a school must possess in order to build an open and healthy school culture. Schools with cultures that included trust were good places to work and learn. Teachers were happy and productive and students liked to be at school. A culture of trust created an atmosphere for teachers where they were willing to improve without failing or being criticized. The teachers took risks and were not afraid of making mistakes because they knew that their principal and colleagues supported them (Hoy & Tarter, 1997).

Different types of trust emerged on a school campus. Trust in the principal was a confidence held by the faculty that the principal would keep his or her word and act in the best interests of the teachers. Trust in colleagues was the belief by the faculty that teachers could depend on each other (Tschannen-Moran & Hoy, 1998).

Trust was a crucial component of shared governance and teacher empowerment. Schmuck and Runkel (1994) defined trust as “a quality that is built very slowly and in small increments, is established more by deed than by words, and is sustained by openness in interpersonal relations” (p. 127). According to Convey (1989), trust equated to “safeness”. If teachers felt safe, they worked together to identify and solve problems.
Difficult or delicate issues about work and performance could be discussed. Without trust, people closed up, kept to themselves, and did not discuss and resolve issues, keeping a school from improving and growing.

Successful shared governance principals built a trusting environment by: (a) encouraging openness; (b) facilitating effective communication; and (c) modeling understanding. Openness was demonstrated by principals when they de-emphasized status differences, believed in equality among professionals, and had the knowledge that people flourish when they feel free. Effective communication required active listening and paraphrasing. Understanding occurred when a person looked at an issue from another person’s point of view. Effective principals modeled these behaviors in all interactions. Principals demonstrated trust in teachers’ professional judgment by encouraging teacher involvement, expecting them to make and implement instructional decisions, eliminating intimidation, and facilitating empowerment with guidance, encouragement, support, and praise (Blase & Blase, 2001a).

Successful shared governance principals supported experimentation and risk taking because they knew that without risk, there could be no improvement. In order for teachers to take risks, they must feel safe. There must be a high degree of trust and openness (Blase & Blase, 2001a). According to Berkey and colleagues (1990), students also benefited from such an environment. Because students were in a non-threatening learning environment, they were more willing to take risks and meet challenges. The following suggestions were offered for principals to support risk and lessen the threat: (a) trust that teachers are learners who will take responsibility; (b) be a facilitator;
(c) model shared governance behaviors; (d) consider the change as a quiet change; (e) personify hope; (f) cultivate grace; and (g) tolerate ambiguity (Blase & Blase, 2001a). In effective shared governance schools, members recognized their interdependence, strived to protect trusting relationships, and realized that a single action can have a profound, destructive consequence (Schmuck & Runkel, 1994). Principals built and maintained trust among staff members by: (a) listening with respect; (b) being a model of trust; (c) helping others communicate effectively; (d) clarifying expectations; (e) celebrating experimentation and support risk; and (f) exhibiting personal integrity (Blase & Blase, 2001a).

Professional Development

Professional development was a powerful tool for principals to endorse. Not only could staff development improve classroom instruction, it also allowed for teacher growth and collegial support. Professional development was a crucial component of successful school reform (Louis & Miles, 1990).

Individual professional growth has changed to a culture-centered approach, where professionals learn and practice together. In order for schools to improve, teams of teachers improved together. The goal of professional development was the inculcation of a continuous improvement philosophy among teams of professionals, not individual teachers. This occurred in schools with healthy cultures that promoted high levels of professional collaboration, collegiality, and self-determination. Schools demonstrated high quality culture through team actions, growth, and willingness to improve. In true learning communities, there was support for all to learn through collaboration, reflection,
and continuous evaluation of tools and methods. Members recognized the importance of listening to and supporting each other. All members of the school community were promoted to learn (Wagner & Masden-Copas, 2002).

Effective shared governance principals had seven beliefs about professional development. These beliefs guided their plans to help teachers grow. The beliefs were: (a) the principal is a guide or facilitator for staff development; (b) everyone can improve; (c) change comes from realizing that something is not quite right or not as good as it could be; (d) change is challenging and emotional; (f) teachers can teach each other; (g) staff development will take many forms; and (h) all educators engage in action research (Blase & Blase, 2001a).

Past school improvement efforts focused on individual professional development to inform teachers about the rapid changes in schooling. Nowadays, teamwork and collegiality are emphasized. “Teaming leads to a collaborative community, greater productivity, and a sense of fulfillment among the people of a unit, department, company, or organization (Smith & Lindsay, 2001, p. 70). Teaming positively impacted four dimensions of school culture: (a) teachers felt less isolated in their work; (b) teachers reported higher levels of collaboration with their peers; (c) teachers were more involved in school-wide decision making; and (d) teachers reported a greater sense of responsibility for their students and school (Keiffer-Barone & Ware, 2002).

Collegial and collaborative cultures had well-defined characteristics. People shared a common vision of what they were trying to achieve, were tolerant and supportive of each other, and shared in joint decision making processes (Stoll & Fink,
1996). Such cultures were created from a sense of trust between leaders and staff members. Trust was indicated by a lack of close monitoring and delegation of responsibilities (Locke, 1992). Collaborative environments included the following: (a) more complex problem solving and extensive sharing of craft knowledge; (b) stronger professional networks to share information; (c) greater risk taking and experimentation; (d) richer technical language shared by educators in the school that can transmit professional knowledge quickly; (e) increased job satisfaction and identification with the school; and (f) more continued and comprehensive attempts to improve the school (Peterson, 2002b).

Shared governance principals used professional development, current professional literature, support, and availability as strategies to increase teacher knowledge. Teachers often initiated and defined staff development activities. Support included providing resources in a timely fashion. Available principals made themselves accessible to discuss instructional or related issues with teachers. These strategies increased teachers’ feelings of confidence and encouraged them to try innovative and creative classroom instruction. Professional literature and support impacted teachers’ classroom efficacy, motivation, and esteem. Availability impacted satisfaction, motivation, confidence, and security. Providing resources impacted teachers’ feelings of inclusion (Blase & Blase, 2001a).

To implement successful professional growth programs for teachers, principals should ensure that the following guidelines were followed: (a) relate all professional development activities to the school’s “driving dream”; (b) provide a variety of professional development opportunities; (c) respect teachers’ judgments about
implementation; (d) be knowledgeable; (e) strive for institutionalization of professional
development activities; and (f) avoid staleness (Blase & Blase, 2001a).

Autonomy and Innovation

Encouraging teacher autonomy and innovation were factors that enabled teachers
to release their instructional potential. “Autonomy refers to the degree of freedom that
teachers have in determining their work processes, and innovation refers to the design
and implementation of experimental processes and new content for use in the classroom”
(Blase & Blase, 2001a, p. 88). Shared governance principals minimized interruptions and
encouraged the use of new teaching techniques, new materials, new curricula, and new
programs. By doing this, they displayed that teaching and learning were the priority.
Teachers reported that the granting of autonomy and innovation enhanced their self-
estee m, confidence, satisfaction, creativity, sense of classroom efficacy, and ability to
reflect.

Healthy levels of autonomy and innovation were encouraged. To promote these
the following strategies should be followed: (a) use proactive strategies to promote
autonomy and innovation; (b) show support by involving yourself; (c) set high
expectations; and (d) demonstrate dedication to improvement (Blase & Blase, 2001a).

Decision-Making

An atmosphere of collegial, participative decision-making benefited schools.
These actions facilitated the complex act of teaching, unleashed teachers’ potential,
supported innovation and risk taking, and increased students’ intellectual and social development (Blase & Blase, 2001a).

Crockenberg and Clark (1979) identified five levels of teacher involvement in decision making: (a) recommendation – teachers advise the principal; (b) information – representative teachers relay the principal’s decisions; (c) consultation – principal consults with teachers before making decisions; (d) approval – representatives alter, approve, or reject the principal’s decisions; and (e) authorization – teacher representatives make final decisions. Involvement in decisions also depends on the nature of the issue, the degree to which the teachers’ interests were affected, and the teachers’ willingness to take risks and assume responsibility for decisions. Blase and Blase (2001a) cited the work of Allen who found that some teachers did not accept invitations to voice their thoughts. He found six factors for a teachers’ lack of interest. They included: (a) teacher’s background discourages the opening of a point of view; (b) issues are not of interest to the teacher; (c) invitation is not interpreted as being sincere; (d) insufficient information is available; (e) audience is intimidating; and (f) setting or structure of the workday is not conducive to expressing one’s thoughts.

Hallinger and Richardson, also cited by Blase and Blase (2001a), made the distinction between four models of involving teachers in school-wide decision-making. The four models were: (a) principal’s advisory council - a select group of faculty members that act as advisories to the principal on policies and management; (b) school improvement team - a council composed of teachers, parents, and the principal who work toward adopting common goals for school-wide improvement; (c) instructional support
team - composed of volunteers of principal-appointed interdisciplinary staff members
who deal with the instructional matters of learning problems, curriculum, and
instructional improvement; and (d) lead teacher committee - delegated formal authority
by the board of education and involves matters of teacher orientation and administrative
and instructional mentoring.

Rewards

Principal rewards facilitated teacher empowerment, created teacher satisfaction,
provided motivation to work harder, and increased a teacher’s sense of self-efficacy and
self-esteem. Successful shared governance principals used both extrinsic and intrinsic
rewards. Simple, sincere praise was found to be an effective and valued form of
rewarding teachers. There were unlimited opportunities and methods for praising
teachers. Principals recognized special successes, acknowledged work above and beyond
one’s duty, recognized unique contributions of teachers, and recognized day-to-day
challenges encountered. For example, written notes and positive comments, privately
and in staff meetings, certificates and awards, and/or comments on evaluations could be
used. Teachers reported that praise and other symbolic rewards increased their desire to
work harder, their sense of efficacy, their self-esteem, and their motivation, as long as
they were not accompanied by increased and unreasonable professional expectations.
Positive feedback reinforced behavior that should be encouraged. Such recognition built
morale and demonstrated to staff members that their efforts were noticed. The following
guidelines should be followed to enhance a principal’s rewarding of teachers: (a) keep
abreast of teacher activities; (b) limit assignments for already-overloaded teachers;
(c) relate rewards to professional achievements; (d) recognize teachers’ work frequently; and (e) use many avenues of rewards (Blase & Blase, 2001a).

Summary

“Today’s principal is faced with the complex task of creating a school-wide vision, being an instructional leader, planning for effective professional development, guiding teachers, handling disciplining, attending events, coordinating buses, tending to external priorities such as legislative mandates, and all the other minute details that come with supervising a school” (Hertling, 2001, p. 1). A healthy school had a principal that was a dynamic leader who integrated task-oriented and relations-oriented behavior and was able to influence his or her superiors to get what was needed for the school. Teachers were committed to teaching and learning, set high, achievable goals for students, maintained high performance standards, promoted a serious, orderly learning environment, liked and trusted their colleagues, and displayed enthusiasm about work. Students worked hard on their work, were highly motivated, and respected other students. The school was protected from unreasonable community and parental pressures, and classroom supplies and instructional materials were available (The organizational health inventory).

A healthy school culture positively impacted student achievement and job satisfaction. Schools showing continuous improvement in student achievement were those whose cultures were permeated by: (a) shared focus; (b) reflective practices; (c) collaboration and partnerships; and (d) ever increasing leadership capacity. To build a healthy learning environment in schools, faculty and students identified the culture they
wanted and the principal assisted in the creation. Administrators fostered an environment that enhanced the personal growth of staff members through supporting creativity, team building, and participation in solving problems. Also, administrators treated students with respect and communicated and supported students. If efforts at school reform were to be successful then quality individuals in the classroom, both teachers and students, needed to be developed and maintained (O’Neill & Conzemius, 2002).

Shared governance schools looked very different. “In these schools, a community of learners respect and trust each other, draw on each other’s many talents, and enact their passion for teaching” (Blase & Blase, 2001a, p. 154).

In cultures of commitment, it is not so much the administrators who hold teachers accountable, it is the teachers who hold themselves accountable to creating genuine learning opportunities for their students. Their sense of accountability is passed on to the students. Teachers work on motivating the students to take responsibility for their learning. One builds such a culture of commitment by a process of organic management. By organic management I mean that the administrator continually tries to focus on the core or central work of the school and brings others’ attention to the central work. The core work of the school is the work of learning (Starratt, 1996, p. 120).

Shared governance principals affected the culture of an organization. They helped transform the school by building group cooperation and spirit (Pajak, 1993). Building a school where shared governance flourished required a metamorphosis in principals. Principals paid greater attention to teacher and group needs, shared power with others,
viewed self as a facilitator and advisor, created and nurtured a culture of collegial support and trust, and modeled empowerment behaviors (Blase & Blase, 2001a).

Organization of the Study

Chapter 2 was a complete review of literature of school culture and student achievement. Chapter 3 will describe the methodology and statistical procedures used in determining the cultures of selected middle schools in Osceola County, Florida and how those cultures relate to student achievement. Chapter 4 will analyze the data that was gathered. Chapter 5 will summarize the data, share conclusions, and offer recommendations.
CHAPTER 3
METHODOLOGY

Introduction

The purpose of this chapter is to describe the methodology and statistical procedures used in determining the cultures of selected middle schools in Osceola County, Florida and how those cultures relate to student achievement. Collection and analysis of survey data identified instructional personnel perceptions of their school’s culture. Collection and analysis of 2004-2005 FCAT reading scores identified student achievement. Comparative and descriptive analysis of the data provided the ability to make a determination if there were relationships between the school’s culture and student achievement.

This study was initiated in the 2005 summer semester at the University of Central Florida. Preliminary comparison and analysis of data were also completed in the 2005 summer semester. The final analysis of data, conclusions, and recommendations were presented in the 2005 fall semester.

This chapter is divided into six sections. The first section presents a statement of the problem. The second section describes the study’s population. The third section outlines the data collection. The fourth section profiles the instrumentation. Section five recounts the research questions. The data analysis is described in section six. Chapter 3 concludes with a summary of the six sections.
Problem Statement

This study was developed to provide data concerning the cultures of the selected middle schools in Osceola County, Florida. The problem of this study was: (a) to determine to what extent middle schools scoring in the top half and the bottom half of the modified version of Wagner and Masden-Copas’ *School Culture Triage Survey* differed on various demographic elements; (b) to determine what differences, if any, existed between the cultures of the selected Florida middle schools and student achievement as measured by the percentage of middle school students scoring at level 3 and above on the 2005 FCAT reading portion; and (c) to determine what relationships, if any, existed among the three key areas of school culture (collaboration, collegiality, and self-determination/efficacy) and student achievement?

The results of this study added to the research on the importance of school culture in an era of increased accountability and higher standards. The results may be valuable to researchers interested in school culture as it relates to improving student achievement. Also, the results may be used to assist school principals in creating and maintaining positive school cultures.

Population

The population of this study was comprised of instructional personnel. The faculty members were employed at one of the six participating middle schools in Osceola County School District, Kissimmee, Florida during the 2004-2005 school year. One middle school chose not to participate in this study.
Data Collection

In order to get a high return rate, the researcher followed Dillman’s tailored design method. This method was based on the social exchange theory. According to Dillman (2000), respondents must be motivated to complete the questionnaire and multiple attempts were essential to achieve satisfactory rates. Using the tailored design method, trust was created with respondents, respondents were rewarded, and costs were reduced for being a respondent. The researcher built trust by providing a small token of appreciation in advance. A one dollar bill was attached to the inside of the survey. The respondent could keep the one dollar without returning the survey. Also, the researcher printed personalized letters on letterhead stationery to the respondents. Positive rewards were given to the respondents with the tangible reward of the one dollar. Also, each contact expressed verbal appreciation, such as your help is much appreciated and thank you. Finally, social costs were reduced by avoiding respondent’s inconvenience. The questionnaire was short and easy to fill out. A self-addressed, stamped envelope was provided for the fifth contact. Five carefully timed, personalized contacts were used in the method. Dillman conducted repeated tests to measure this approach and showed consistent response rates of 70% for general public populations. That percentage could be higher for more specialized populations with higher levels of education.

The researcher recruited the reading coach at each of the six participating middle schools to act as the contact person for their school. They attended a meeting where the researcher described the scope and importance of the study and requested their help. They agreed. On May 16, 2005 each reading coach received a prenotice letter (see
Appendix A), a survey cover letter (see Appendix B), and a set of numbered survey instruments (see Appendix C) to distribute to the instructional personnel at each of their schools. The survey cover letter requested that the surveys be completed and returned to the reading coach by May 23, 2005.

The first contact with the instructional personnel who were asked to complete the survey was the prenotice letter. The reading coach put the letter in each mailbox. The letter explained that a survey would follow in a couple of days. Two days later, each participant received the survey cover letter and the survey with a one dollar bill attached. The first and second contacts yielded 50 returns from School A, 53 from School B, 62 from School C, 55 from School D, 32 from School E, and 26 from School F. This provided a total return rate of 66% (n = 278). The third contact included sending to the reading coach a postcard for all instructional personnel who had not responded (see Appendix D). The postcard reminded them to please fill out the survey. Thirty four more surveys were returned, six from School C, 17 from School D, six from School E, and five from School F (n = 312). The third contact yielded a total return rate of 72%. A fourth contact was made to the remaining instructional personnel (see Appendix E). This letter explained the importance of their response and asked them to please take the time to fill out the survey. Another survey was attached. Twenty more surveys were returned, three from School B, five from School D, eight from School E, four from School F (n = 332). The fourth contact yielded a total return rate of 77%. The fifth and final contact was a letter with another survey mailed to each non-respondent’s home address.
An additional 20 surveys were returned, seven from School A, one from School B, seven from School D, one from School E, and three from School F ($n = 352$). A total of 352 out of 431 surveys were returned, which gave a return rate of 82%. Nine of the surveys could not be used, five from School A, one from School B, two from School D, and one from School E. Four instructional personnel from School A, one from School B, one from School D, and one from School E refused to participate and returned the surveys unanswered. One survey from School A was incomplete and could not be used because more than 50% of the questions were unanswered. One survey could not be used because the survey number was scratched out and the researcher did not know to which school it belonged. The final usable return rate from the five contacts yielded 52 usable surveys from School A (72% return rate), 56 from School B (70% return rate), 68 from School C (100% return rate), 82 from School D (85% return rate), 47 from School E (72% return rate), and 38 from School F (76% return rate). Of the 352 surveys that were returned, 343 were able to be used, yielding an overall return rate of 80%.

Instrumentation

Data were collected using the Modified School Culture Triage Survey. In its original form, it was developed by Wagner and Masden-Copas (2002) and was titled, Self Assessment: School Culture Triage. It was designed to assess the current condition of a school’s culture. The survey instrument in this study was further modified from Cunningham’s (2003) School Culture Survey. With permission from both authors (see Appendix G and H), the researcher revised the instrument to include an additional
demographic item that asked the respondent to write in their job title. Permission to use human subjects was granted from the University of Central Florida’s Institutional Review Board (IRB) (see Appendix I). In order to gain permission, the researcher completed the IRB packet. This packet included the title of the project, dates of the proposed project, source of funding, a description of the scientific purpose of the investigation and the research methodology, potential benefits and anticipated risks, and a description of how participants were recruited, the number and age of participants, the proposed compensation, and the informed consent process.

The survey instrument consisted of four sections: (a) five questions on collaboration; (b) seven questions on collegiality; (c) six questions on self-determination/efficacy; and (d) six demographic questions. For the first three sections, respondents were asked to rate the extent to which the identified items were present in their school, using a five-point Likert scale (1 = Never; 2 = Rarely; 3 = Sometimes; 4 = Often; 5 = Always). The demographic data were used as variables in the data analysis.

Survey items 1-5 measured professional collaboration; 6-12 measured collegiality; and 13-18 measured self-determination/efficacy. Survey items 19-24 requested demographic information on: (a) total years teaching experience; (b) number of years teaching at that school; (c) ethnicity; (d) gender; (e) current grade level; and (f) job title.
Research Questions

The following research questions were created based on a comprehensive review of literature:

1. To what extent do middle schools scoring in the top half and bottom half on the Modified School Culture Triage Survey differ on: (a) average total years of teaching experience of the faculty; (b) average total years of teaching experience of the faculty at the present school; (c) ethnic composite of the faculty; and (d) gender composite of the faculty?

2. What differences, if any, exist between the cultures of middle schools as measured by the Modified School Culture Triage Survey and student achievement as measured by the percentage of middle school students scoring at level 3 and above on the 2004-2005 FCAT reading?

3. What relationships, if any, exist among the three key areas of middle school culture (collaboration, collegiality, and self-determination/efficacy) and student achievement?

Data Analysis

The researcher completed all statistical computations using the statistical software SPSS Graduate Pack 11.0 for Windows. Analyses of the data were reported using descriptive statistics, percentile rank, and means scores for each variable.

All surveys were collected and separated by school using a numerical code printed on each survey. The numeric code identified the school and the respondent for follow up during the data collection phase of the study. When follow up was completed,
the respondent’s name was deleted from the database used to track completed surveys. Responses for the 18 survey items were converted to numerical scores for each item using a five-point Likert scale: 1 = Never; 2 = Rarely; 3 = Sometimes; 4 = Often; and 5 = Always. Overall school totals were determined for each survey item and mean scores by item were obtained by totaling each school’s score for each survey item and dividing by the number of respondents. This resulted in a mean score for each of the respondent schools.

Wagner and Masden-Copas (2002) described overall school cultures falling into four quartiles: (a) the first quartile was in need of critical and immediate attention; (b) the second quartile was in need of modifications and improvements; (c) the third quartile had a strong culture, but school leaders needed to continue to monitor and make positive improvements; and (d) the fourth quartile was amazing, but also needed to be monitored to ensure it kept its healthy culture. School culture scores were analyzed and compared within these parameters.

Data for the 2004-2005 Florida Comprehensive Assessment Test (FCAT) reading portion were obtained from the Florida Department of Education website (http://www.fldoe.org) for each middle school. The percentage of students scoring at level 3 and above on the 2004-2005 FCAT reading was used in the analysis of data.

Data Analysis for Research Question 1

Research Question 1 focused on the extent that middle schools scoring in the top half and bottom half on the Modified School Culture Triage Survey differed on:
(a) average total years of teaching experience of the faculty; (b) average total years of teaching experience of the faculty at the present school; (c) ethnic composite of the faculty; and (d) gender composite of the faculty. Descriptive statistics were used in determining differences.

The middle schools were then divided into two groups according to their school culture scores on the Modified School Culture Triage Survey. The total score for each school was calculated by summing the total points for each of the 18 survey items and dividing by the number of individual respondents per school.

The groups were divided as follows: top half of the Modified School Culture Triage Survey scores (N = 3) and the bottom half of the Modified School Culture Triage Survey scores (N = 3). Descriptive statistics for each group were calculated on all demographic variables. In order to compare, mean percentages were reported for total years teaching experience of the faculty, years teaching experience at the present school, ethnicity composite, and gender composite of the faculty.

Data Analysis for Research Question 2

In order to answer Research Question 2, which asked what differences, if any, existed between the cultures of middle schools as measured by the Modified School Culture Triage Survey and student achievement as measured by the percentage of middle school students scoring at level 3 and above on the 2004-2005 FCAT reading, data were obtained by dividing the six schools into two groups according to their overall school scores on the Modified School Culture Triage Survey. The groups were divided as follows: top half of the Modified School Culture Triage Survey scores (N = 3) and the
bottom half of the *Modified School Culture Triage Survey* scores \((N = 3)\). A t-test and nested ANOVA were calculated to determine if any significant differences existed in student achievement based on FCAT score for each group and between groups formed by the *Modified School Culture Triage Survey* scores.

Data Analysis for Research Question 3

For Research Question 3, the scores on the three key areas of the *Modified School Culture Triage Survey* (collaboration, collegiality, and self-determination/efficacy) were summed and divided into three groups on each of the key areas. The percentages of students scoring at level 3 and above on the 2004-2005 FCAT reading portion were recorded for each school and a regression was used to determine if any significant relationships existed between the scores on the *Modified School Culture Triage Survey* key areas and student achievement based on the FCAT reading scores for each group.

Summary

This chapter outlined the methodology and procedures used to determine the overall cultures of six middle schools in Osceola County, Florida and how these cultures related to student achievement in each of the schools. The chapter began with a description of the population and problem statement. Next, the chapter discussed the development of the survey instrument and the statistical procedures used in the analysis of the data.

Data were based on an overall survey return rate of 82% from the six middle
schools. A total of 343 returned surveys were able to be used by the researcher which yielded a return rate of 80%. Conclusions from the results of the generated data were used to answer the three research questions. Chapter 4 presents an analysis of the results of the statistical tests. Tables and charts are used to support the narrative of the presentation of the data. Chapter 5 summarizes the data, shares conclusions, and offers recommendations.
CHAPTER 4
ANALYSIS OF DATA

Introduction

This quantitative study was developed to gather data about the relationship of middle school cultures and student achievement. It was intended to contribute to the existing body of knowledge on collaboration, collegiality, and self-determination/efficacy as related to student achievement. Three research questions provided the focus for this study. The research questions were:

1. To what extent do middle schools scoring in the top half and bottom half on the Modified School Culture Triage Survey differ on: (a) average total years of teaching experience of the faculty; (b) average total years of teaching experience of the faculty at the present school; (c) ethnic composite of the faculty; and (d) gender composite of the faculty?

2. What differences, if any, exist between the overall cultures of middle schools as measured by the Modified School Culture Triage Survey and student achievement as measured by the percentage of middle school students scoring at level 3 and above on the 2004-2005 FCAT reading?

3. What relationships, if any, exist among the three key areas of middle school culture (collaboration, collegiality, and self-determination/efficacy) and student achievement?
School culture was measured by the *Modified School Culture Triage Survey*. Student achievement was measured by the percentage of students scoring at level 3 and above on the 2004-2005 FCAT reading portion.

Chapter 4 has been divided into four sections. The first section describes the study’s population and demographic characteristics. The second section contains data analysis related to the first research question. Data analyses for research questions two and three were contained in the third and fourth section, respectively. The data were generated from middle school instructional personnel responses obtained on the self-administered survey instrument and assessment of student achievement as measured by the reading portion of the FCAT.

**Population and Demographic Characteristics**

The population of this study was comprised of instructional personnel employed at one of the six participating middle schools in Osceola County School District, Florida during the 2004-2005 school year. There were seven middle schools in the district, but one chose not to participate. Data were generated from each of the middle schools following the distribution of survey instruments. A total of 343 usable surveys were returned from the six middle schools. Tables 1-6 present the demographic information obtained through a descriptive analysis of average percentages for the demographic items on the survey instrument. The same information is presented in Figures 1-6. Survey items 19-24 (total years teaching experience, years teaching at the present school, ethnicity, gender, grade level, and job title) were used to obtain professional and personal
data for each responding school. The data presented were found in this study. Inferences regarding causality should not be made.

Research Question 1

To what extent do middle schools scoring in the top half and bottom half on the Modified School Culture Triage Survey differ on: (a) average total years of teaching experience of the faculty; (b) average total years of teaching experience of the faculty at the present school; (c) ethnic composite of the faculty; and (d) gender composite of the faculty?

Table 1 presents the total years teaching experience of the participating instructional personnel. Figure 1 presents the same information. The five categories of experience were: 2 or less years; 3-5 years; 6-8 years; 9-11 years; and 12 or more years. The responding schools were grouped into the top half on the Modified School Culture Triage Survey ($N = 3$) and the bottom half on the Modified School Culture Survey ($N = 3$).

Schools scoring in the top half on the Modified School Culture Triage Survey had an average of 22% ($n = 39$) of instructional personnel with 2 or less years total teaching experience, 21% ($n = 37$) had 3-5 years experience, 14% ($n = 25$) had 6-8 years experience, 5% ($n = 8$) had 9-11 years experience, and 38% ($n = 67$) had 12 or more years. Schools scoring in the bottom half on the Modified School Culture Triage Survey had an average of 21% ($n = 35$) of instructional personnel with 2 or less years total teaching experience, 20% ($n = 34$) had 3-5 years experience, 15% ($n = 25$) had 6-8 years experience, 10% ($n = 17$) had 9-11 years experience, and 33% ($n = 55$) had 12 or more years.
Table 1

Average Percentages – Total years teaching experience (N = 342)

<table>
<thead>
<tr>
<th>Schools Scoring Range</th>
<th>2 or less years</th>
<th>3-5 years</th>
<th>6-8 years</th>
<th>9-11 years</th>
<th>12 or more years</th>
</tr>
</thead>
<tbody>
<tr>
<td>Top half (N = 176)</td>
<td>22% (n = 39)</td>
<td>21% (n = 37)</td>
<td>14% (n = 25)</td>
<td>5% (n = 8)</td>
<td>38% (n = 67)</td>
</tr>
<tr>
<td>Bottom half (N = 166)</td>
<td>21% (n = 35)</td>
<td>20% (n = 34)</td>
<td>15% (n = 25)</td>
<td>10% (n = 17)</td>
<td>33% (n = 55)</td>
</tr>
</tbody>
</table>

*Note.* Not all respondents answered all survey items.

Figure 1: Average Percentages – Total years teaching experience

Table 2 presents the average years teaching experience at the present school. The same information is presented in Figure 2. The five categories of experience were: 2 or less years; 3-5 years; 6-8 years; 9-11 years; and 12 or more years. The responding schools were grouped in the top half on the *Modified School Culture Triage Survey*
(N = 3) and the bottom half on the Modified School Culture Survey (N = 3).

Schools scoring in the top half on the Modified School Culture Triage Survey had an average of 47% (n = 82) of instructional personnel with 2 or less years teaching experience at the present school, 22% (n = 39) had 3-5 years experience, 10% (n = 17) had 6-8 years experience, 8% (n = 14) had 9-11 years experience, and 14% (n = 24) had 12 or more years. Schools scoring in the bottom half on the Modified School Culture Triage Survey had an average of 39% (n = 64) of instructional personnel with 2 or less years teaching experience at the present school, 34% (n = 56) had 3-5 years experience, 16% (n = 27) had 6-8 years experience, 5% (n = 8) had 9-11 years experience, and 7% (n = 11) had 12 or more years.

Table 2

Average Percentages – Years of teaching experience at the present school (N = 342)

<table>
<thead>
<tr>
<th>Schools Scoring Range</th>
<th>2 or less years</th>
<th>3-5 years</th>
<th>6-8 years</th>
<th>9-11 years</th>
<th>12 or more years</th>
</tr>
</thead>
<tbody>
<tr>
<td>Top half (N = 176)</td>
<td>47% (n = 82)</td>
<td>22% (n = 39)</td>
<td>10% (n = 17)</td>
<td>8% (n = 14)</td>
<td>14% (n = 24)</td>
</tr>
<tr>
<td>Bottom half (N = 166)</td>
<td>39% (n = 64)</td>
<td>34% (n = 56)</td>
<td>16% (n = 27)</td>
<td>5% (n = 8)</td>
<td>7% (n = 11)</td>
</tr>
</tbody>
</table>

Note. Not all respondents answered all survey items
Table 3 presents the ethnicity of instructional personnel of the responding schools. The same information is presented in Figure 3. The five categories of ethnicity were: African American, Asian, Caucasian, Hispanic, and Other. The responding schools were grouped in the top half on the Modified School Culture Triage Survey \((N = 3)\) and the bottom half on the Modified School Culture Survey \((N = 3)\).

Schools scoring in the top half on the Modified School Culture Triage Survey had an average of 4% \((n = 6)\) of instructional personnel who were African American, 0% \((n = 0)\) Asian, 83% \((n = 141)\) Caucasian, 9% \((n = 16)\) Hispanic, and 4% \((n = 6)\) Other. Schools scoring in the bottom half on the Modified School Culture Triage Survey had an average of 16% \((n = 25)\) of instructional personnel who were African American, 1% \((n = 1)\) Asian, 48% \((n = 78)\) Caucasian, 26% \((n = 42)\) Hispanic, and 9% \((n = 15)\) Other.
Table 3

Average Percentages – Ethnicity of instructional personnel (N=330)

<table>
<thead>
<tr>
<th>Schools Scoring Range</th>
<th>African American</th>
<th>Asian</th>
<th>Caucasian</th>
<th>Hispanic</th>
<th>Other</th>
</tr>
</thead>
<tbody>
<tr>
<td>Top half (N = 169)</td>
<td>4% (n = 6)</td>
<td>0% (n = 0)</td>
<td>83% (n = 141)</td>
<td>9% (n = 16)</td>
<td>4% (n = 6)</td>
</tr>
<tr>
<td>Bottom half (N = 161)</td>
<td>16% (n = 25)</td>
<td>1% (n = 1)</td>
<td>48% (n = 78)</td>
<td>26% (n = 42)</td>
<td>9% (n = 15)</td>
</tr>
</tbody>
</table>

*Note.* Not all respondents answered all survey items

Figure 3: Average Percentages – Ethnicity of instructional personnel

Table 4 presents the gender of instructional personnel of the responding schools.

The same information is presented in Figure 4. The two categories of gender were female and male. The responding schools were grouped in the top half on the *Modified School Culture Triage Survey* (N = 3) and the bottom half on the *Modified School Culture Survey* (N = 3).
Schools scoring in the top half on the *Modified School Culture Triage Survey* had an average of 76% \((n = 133)\) female instructional personnel and 24% \((n = 41)\) male instructional personnel. Schools scoring in the bottom half on the *Modified School Culture Triage Survey* had an average of 72% \((n = 118)\) female instructional personnel and 28% \((n = 47)\) male instructional personnel.

Table 4

Average Percentages – Gender of instructional personnel \((N = 339)\)

<table>
<thead>
<tr>
<th>Schools Scoring Range</th>
<th>Female</th>
<th>Male</th>
</tr>
</thead>
<tbody>
<tr>
<td>Top half ((N = 174))</td>
<td>76% ((n = 133))</td>
<td>24% ((n = 41))</td>
</tr>
<tr>
<td>Bottom half ((N = 165))</td>
<td>72% ((n = 118))</td>
<td>28% ((n = 47))</td>
</tr>
</tbody>
</table>

*Note.* Not all respondents answered all survey items.
Even though the following information was not in the research question, the researcher asked the instructional personnel what grade level they taught and their job title. Table 5 presents the grade level of instructional personnel of the responding schools. The same information is presented in Figure 5. The four categories of grade level were: sixth, seventh, eighth, and mixed. Mixed grade level personnel taught a combination of students in sixth, seventh, and/or eighth grade. The responding schools were grouped in the top half on the Modified School Culture Triage Survey (N = 3) and the bottom half on the Modified School Culture Survey (N = 3).

Schools scoring in the top half on the Modified School Culture Triage Survey had an average of 23% (n = 39) of instructional personnel teaching sixth grade, 18% (n = 31) teaching seventh grade, 23% (n = 40) teaching eighth grade, and 36% (n = 63) teaching mixed grade levels. Schools scoring in the bottom half on the Modified School Culture
Triage Survey had an average of 22% \((n = 35)\) of instructional personnel teaching sixth grade, 19% \((n = 29)\) teaching seventh grade, 18% \((n = 30)\) teaching eighth grade, and 42% \((n = 68)\) teaching mixed grade levels.

Table 5

Average Percentages – Grade level of instructional personnel \((N = 335)\)

<table>
<thead>
<tr>
<th>Schools Scoring Range</th>
<th>Sixth</th>
<th>Seventh</th>
<th>Eighth</th>
<th>Mixed</th>
</tr>
</thead>
<tbody>
<tr>
<td>Top half ((N = 173))</td>
<td>23%</td>
<td>18%</td>
<td>23%</td>
<td>36%</td>
</tr>
<tr>
<td>((n = 39))</td>
<td>((n = 31))</td>
<td>((n = 40))</td>
<td>((n = 63))</td>
<td></td>
</tr>
<tr>
<td>Bottom half ((N = 162))</td>
<td>22%</td>
<td>19%</td>
<td>18%</td>
<td>42%</td>
</tr>
<tr>
<td>((n = 35))</td>
<td>((n = 29))</td>
<td>((n = 30))</td>
<td>((n = 68))</td>
<td></td>
</tr>
</tbody>
</table>

Note. Not all respondents answered all survey items

Figure 5: Average Percentages – Grade level of instructional personnel
Table 6 presents the job title of instructional personnel of the responding schools. The same information is presented in Figure 6. Respondents were asked to write in their job title. The researcher then sorted them into eight categories: language arts, math, reading, science, social studies, elective, exceptional student education (ESE), and other. The responding schools were grouped in the top half on the Modified School Culture Triage Survey ($N = 3$) and the bottom half on the Modified School Culture Survey ($N = 3$).

Schools scoring in the top half on the Modified School Culture Triage Survey had an average of 16% ($n = 20$) of instructional personnel teaching language arts, 7% ($n = 9$) teaching math, 13% ($n = 16$) teaching reading, 11% ($n = 14$) teaching science, 10% ($n = 13$) teaching social studies, 19% ($n = 23$) teaching an elective, 15% ($n = 18$) teaching exceptional student education, and 9% ($n = 11$) other. Schools scoring in the bottom half on the Modified School Culture Triage Survey had an average of 13% ($n = 16$) of instructional personnel teaching language arts, 13% ($n = 16$) teaching math, 7% ($n = 9$) teaching reading, 13% ($n = 16$) teaching science, 11% ($n = 14$) teaching social studies, 12% ($n = 15$) teaching an elective, 18% ($n = 22$) teaching exceptional education, and 14% ($n = 17$) other.
Table 6

Average Percentages – Job title of instructional personnel (N = 249)

<table>
<thead>
<tr>
<th>Schools Scoring Range</th>
<th>LA(^a)</th>
<th>Math</th>
<th>Reading</th>
<th>Science</th>
<th>SS(^b)</th>
<th>Elective</th>
<th>ESE(^c)</th>
<th>Other</th>
</tr>
</thead>
<tbody>
<tr>
<td>Top half (N = 124)</td>
<td>16%</td>
<td>7%</td>
<td>13%</td>
<td>11%</td>
<td>10%</td>
<td>19%</td>
<td>15%</td>
<td>9%</td>
</tr>
<tr>
<td></td>
<td>(n = 20)</td>
<td>(n = 9)</td>
<td>(n = 16)</td>
<td>(n = 14)</td>
<td>(n = 13)</td>
<td>(n = 23)</td>
<td>(n = 18)</td>
<td>(n = 11)</td>
</tr>
<tr>
<td>Bottom half (N = 125)</td>
<td>13%</td>
<td>13%</td>
<td>7%</td>
<td>13%</td>
<td>11%</td>
<td>12%</td>
<td>18%</td>
<td>14%</td>
</tr>
<tr>
<td></td>
<td>(n = 16)</td>
<td>(n = 16)</td>
<td>(n = 9)</td>
<td>(n = 16)</td>
<td>(n = 14)</td>
<td>(n = 15)</td>
<td>(n = 22)</td>
<td>(n = 17)</td>
</tr>
</tbody>
</table>

*Note. Not all respondents answered all survey items*

\(^a\)LA were language arts teachers. \(^b\)SS were social studies teachers. \(^c\)ESE were exceptional student education teachers.

Figure 6: Average Percentages – Job title of instructional personnel

Research Question 2

What differences, if any, exist between the overall cultures of middle schools as measured by the *Modified School Culture Triage Survey* and student achievement as
measured by the percentage of middle school students scoring at level 3 and above on the 2004-2005 FCAT reading?

For Research Question 2, the responding schools were grouped in the top half on the Modified School Culture Triage Survey ($N = 3$) and the bottom half on the Modified School Culture Survey ($N = 3$). Table 7 displays the average percentages of students scoring at level 3 and above on the 2004-2005 FCAT reading. The same information is presented in Figure 7. Schools scoring in the top half on the Modified School Culture Triage Survey had an average of 51% ($n = 1261$) of sixth grade students scoring at level 3 and above, 53% ($n = 1276$) of seventh grade students scoring at level 3 and above, and 44% ($n = 1334$) of eighth grade students scoring at level 3 and above. Schools scoring in the bottom half on the Modified School Culture Triage Survey had an average of 37% ($n = 1170$) of sixth grade students scoring at level 3 and above, 34% ($n = 1255$) of seventh grade students scoring at level 3 and above, and 23% ($n = 1276$) of eighth grade students scoring at level 3 and above.
Table 7

Average Percentages – Students scoring at level 3 and above on the 2004-2005 FCAT reading ($N = 7572$)

<table>
<thead>
<tr>
<th>Schools Scoring Range</th>
<th>Sixth</th>
<th>Seventh</th>
<th>Eighth</th>
</tr>
</thead>
<tbody>
<tr>
<td>Top half ($N = 3871$)</td>
<td>51% ($n = 1261$)</td>
<td>53% ($n = 1276$)</td>
<td>44% ($n = 1334$)</td>
</tr>
<tr>
<td>Bottom half ($N = 3701$)</td>
<td>37% ($n = 1170$)</td>
<td>34% ($n = 1255$)</td>
<td>23% ($n = 1276$)</td>
</tr>
</tbody>
</table>

Figure 7: Average Percentages – Students scoring at level 3 and above on the 2004-2005 FCAT reading

A t-test was calculated to determine if any significant differences existed between the grouped schools’ overall culture scores and the percentages of students scoring at level 3 and above on the 2004-2005 reading portion of the FCAT. An alpha level of .05 was used for the statistical test.
Table 8

T-test Results

<table>
<thead>
<tr>
<th>Grade</th>
<th>t</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sixth</td>
<td>29.952**</td>
</tr>
<tr>
<td>Seventh</td>
<td>77.937**</td>
</tr>
<tr>
<td>Eighth</td>
<td>125.314**</td>
</tr>
</tbody>
</table>

Note. degrees of freedom = 341 for all analyses

**p < .01

There were statistically significant differences among FCAT reading scores between the top and bottom schools in the sixth, seventh, and eighth grade. For the sixth grade, $t = 29.952$ and $p = .000$. The mean for the top half schools was 52.091 and the standard deviation was 4.8039. The mean for the bottom half schools was 36.144 and the standard deviation was 5.0566. For the seventh grade, $t = 77.937$ and $p = .000$. The mean for the top half schools was 53.557 and the standard deviation was 2.5517. The mean for the bottom half schools was 34.030 and the standard deviation was 2.0459. For the eighth grade, $t = 125.314$ and $p = .000$. The mean for the top half schools was 44.511 and the standard deviation was 1.7631. The mean for the bottom half schools was 23.066 and the standard deviation was 1.3933.

The researcher then conducted a nested ANOVA. This was done because the schools were intact and the instructional personnel were already there, so the nested design allowed the researcher to accommodate for this. Several nested designs were
conducted. Collaboration, collegiality, self-determination/efficacy, FCAT 6, FCAT 7, and FCAT 8 were all used as dependent variables.

Table 9
Nested ANOVA Results

<table>
<thead>
<tr>
<th>Variable</th>
<th>F</th>
<th>eta squared</th>
</tr>
</thead>
<tbody>
<tr>
<td>Collaboration</td>
<td>14.458**</td>
<td>.177</td>
</tr>
<tr>
<td>Collegiality</td>
<td>18.336**</td>
<td>.214</td>
</tr>
<tr>
<td>Self-Determination/Efficacy</td>
<td>18.550**</td>
<td>.216</td>
</tr>
<tr>
<td>FCAT 6</td>
<td>7.868*</td>
<td>.663</td>
</tr>
<tr>
<td>FCAT 7</td>
<td>63.162**</td>
<td>.940</td>
</tr>
<tr>
<td>FCAT 8</td>
<td>174.687**</td>
<td>.978</td>
</tr>
</tbody>
</table>

*Note. degrees of freedom = 5,337 for all analyses
*p < .05. **p < .01

The interaction between schools scoring in the top and bottom half on the Modified School Culture Triage Survey and collaboration accounted for 17.7% of the variance, collegiality accounted for 21.4% of the variance, self-determination/efficacy 21.6% of the variance, sixth grade FCAT accounted for 66.3% of the variance, seventh grade FCAT accounted for 94% of the variance, and eighth grade FCAT accounted for 97.8% of the variance. For collaboration, the total mean for the three schools scoring in the top half was 3.3989 and the standard deviation was .71186. The total mean for the three schools scoring in the bottom half was 3.0216 and the standard deviation was
For collegiality, the total mean for the three schools scoring in the top half was 3.5107 and the standard deviation was .64874. The total mean for the three schools scoring in the bottom half was 2.9906 and the standard deviation was .72133. For self-determination/efficacy, the total mean for the three schools scoring in the top half was 3.6832 and the standard deviation was .59261. The total mean for the three schools scoring in the bottom half was 3.0988 and the standard deviation was .76838. For FCAT 6, the total mean for the three schools scoring in the top half was 52.091 and the standard deviation was 4.8039. The total mean for the three schools scoring in the bottom half was 33.144 and the standard deviation was 5.0566. For FCAT 7, the total mean for the three schools scoring in the top half was 53.557 and the standard deviation was 2.5517. The total mean for the three schools scoring in the bottom half was 34.030 and the standard deviation was 2.0459. For FCAT 8, the total mean for the three schools scoring in the top half was 44.511 and the standard deviation was 1.7631. The total mean for the three schools scoring in the bottom half was 23.066 and the standard deviation was 1.3933.

Research Question 3

What relationships, if any, exist among the three key areas of middle school culture (collaboration, collegiality, and self-determination/efficacy) and student achievement?

The researcher conducted many regressions in order to determine which showed the most significant relationship. Regressions were completed for the sixth, seventh, eighth, and all three grades using FCAT as the dependent variable and collaboration
(survey items 1-5), collegiality (survey items 6-12), self-determination/efficacy (survey items 13-18) and a combination of the three as the independent variable.

Table 10
Regression Analysis Results

<table>
<thead>
<tr>
<th>Variable</th>
<th>$F$</th>
<th>$df$</th>
<th>$R^2$</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sixth</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Collab$^a$</td>
<td>24.540**</td>
<td>1,341</td>
<td>.067</td>
</tr>
<tr>
<td>Colleg$^b$</td>
<td>39.579**</td>
<td>1,341</td>
<td>.104</td>
</tr>
<tr>
<td>SDE$^c$</td>
<td>48.155**</td>
<td>1,341</td>
<td>.124</td>
</tr>
<tr>
<td>Collab &amp; Colleg</td>
<td>20.081**</td>
<td>2,340</td>
<td>.106</td>
</tr>
<tr>
<td>Collab &amp; SDE</td>
<td>24.796**</td>
<td>2,340</td>
<td>.127</td>
</tr>
<tr>
<td>Colleg &amp; SDE</td>
<td>25.494**</td>
<td>2,340</td>
<td>.13</td>
</tr>
<tr>
<td>Collab &amp; Colleg &amp; SDE</td>
<td>17.018**</td>
<td>3,339</td>
<td>.131</td>
</tr>
<tr>
<td>Seventh</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Collab$^a$</td>
<td>34.874**</td>
<td>1,341</td>
<td>.093</td>
</tr>
<tr>
<td>Colleg$^b$</td>
<td>56.396**</td>
<td>1,341</td>
<td>.142</td>
</tr>
<tr>
<td>SDE$^c$</td>
<td>64.234**</td>
<td>1,341</td>
<td>.159</td>
</tr>
<tr>
<td>Collab &amp; Colleg</td>
<td>28.699**</td>
<td>2,340</td>
<td>.144</td>
</tr>
<tr>
<td>Collab &amp; SDE</td>
<td>33.636**</td>
<td>2,340</td>
<td>.165</td>
</tr>
<tr>
<td>Colleg &amp; SDE</td>
<td>35.009**</td>
<td>2,340</td>
<td>.171</td>
</tr>
<tr>
<td>Collab &amp; Colleg &amp; SDE</td>
<td>23.427**</td>
<td>3,339</td>
<td>.172</td>
</tr>
</tbody>
</table>
### Eighth

<table>
<thead>
<tr>
<th></th>
<th>Value</th>
<th>df</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td>Collab&lt;sup&gt;a&lt;/sup&gt;</td>
<td>18.897</td>
<td>1,341</td>
<td>.053</td>
</tr>
<tr>
<td>Colleg&lt;sup&gt;b&lt;/sup&gt;</td>
<td>39.725</td>
<td>1,341</td>
<td>.104</td>
</tr>
<tr>
<td>SDE&lt;sup&gt;c&lt;/sup&gt;</td>
<td>58.941</td>
<td>1,341</td>
<td>.147</td>
</tr>
<tr>
<td>Collab &amp; Colleg</td>
<td>19.806</td>
<td>2,340</td>
<td>.104</td>
</tr>
<tr>
<td>Collab &amp; SDE</td>
<td>29.385</td>
<td>2,340</td>
<td>.147</td>
</tr>
<tr>
<td>Colleg &amp; SDE</td>
<td>29.836</td>
<td>2,340</td>
<td>.149</td>
</tr>
<tr>
<td>Collab &amp; Colleg &amp; SDE</td>
<td>19.950</td>
<td>3,339</td>
<td>.15</td>
</tr>
</tbody>
</table>

### All

<table>
<thead>
<tr>
<th></th>
<th>Value</th>
<th>df</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td>Collab&lt;sup&gt;a&lt;/sup&gt;</td>
<td>27.576</td>
<td>1,341</td>
<td>.075</td>
</tr>
<tr>
<td>Colleg&lt;sup&gt;b&lt;/sup&gt;</td>
<td>48.757</td>
<td>1,341</td>
<td>.125</td>
</tr>
<tr>
<td>SDE&lt;sup&gt;c&lt;/sup&gt;</td>
<td>62.340</td>
<td>1,341</td>
<td>.155</td>
</tr>
<tr>
<td>Collab &amp; Colleg</td>
<td>24.498</td>
<td>2,340</td>
<td>.126</td>
</tr>
<tr>
<td>Collab &amp; SDE</td>
<td>31.595</td>
<td>2,340</td>
<td>.157</td>
</tr>
<tr>
<td>Colleg &amp; SDE</td>
<td>32.641</td>
<td>2,340</td>
<td>.161</td>
</tr>
<tr>
<td>Collab &amp; Colleg &amp; SDE</td>
<td>21.706</td>
<td>3,339</td>
<td>.161</td>
</tr>
</tbody>
</table>

*Note.*<sup>a</sup>Collab is collaboration. <sup>b</sup>Colleg is collegiality. <sup>c</sup>SDE is self-determination/efficacy

**p < .01**
Table 11
Regression Analysis Equations

<table>
<thead>
<tr>
<th>Variable</th>
<th>Equation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sixth</td>
<td></td>
</tr>
<tr>
<td>Collab$^a$</td>
<td>$33.717 + 3.300$</td>
</tr>
<tr>
<td>Colleg$^b$</td>
<td>$30.867 + 4.132$</td>
</tr>
<tr>
<td>SDE$^c$</td>
<td>$29.234 + 4.441$</td>
</tr>
<tr>
<td>Collab &amp; Colleg</td>
<td>$30.223 + 0.740 + 3.599$</td>
</tr>
<tr>
<td>Collab &amp; SDE</td>
<td>$28.105 + 0.950 + 3.875$</td>
</tr>
<tr>
<td>Colleg &amp; SDE</td>
<td>$28.115 + 1.634 + 3.204$</td>
</tr>
<tr>
<td>Collab &amp; Colleg &amp; SDE</td>
<td>$27.807 + 0.404 + 1.382 + 3.154$</td>
</tr>
<tr>
<td>Seventh</td>
<td></td>
</tr>
<tr>
<td>Collab$^a$</td>
<td>$30.690 + 4.155$</td>
</tr>
<tr>
<td>Colleg$^b$</td>
<td>$27.208 + 5.170$</td>
</tr>
<tr>
<td>SDE$^c$</td>
<td>$25.753 + 5.383$</td>
</tr>
<tr>
<td>Collab &amp; Colleg</td>
<td>$26.355 + 0.980 + 4.464$</td>
</tr>
<tr>
<td>Collab &amp; SDE</td>
<td>$24.095 + 1.394 + 4.553$</td>
</tr>
<tr>
<td>Colleg &amp; SDE</td>
<td>$24.127 + 2.373 + 3.587$</td>
</tr>
<tr>
<td>Collab &amp; Colleg &amp; SDE</td>
<td>$23.664 + 0.606 + 1.996 + 3.512$</td>
</tr>
<tr>
<td>Eighth</td>
<td></td>
</tr>
<tr>
<td>Collab$^a$</td>
<td>$23.212 + 3.377$</td>
</tr>
<tr>
<td>Colleg$^b$</td>
<td>$18.469 + 4.789$</td>
</tr>
<tr>
<td>SDE$^c$</td>
<td>$15.010 + 5.608$</td>
</tr>
</tbody>
</table>
Collab & Colleg  18.520 - .059 + 4.832
Collab & SDE   15.056 - .038 + 5.631
Colleg & SDE   14.313 + 1.017 + 4.838
Collab & Colleg & SDE 14.758 - .583 + 1.380 + 4.911

All

Collab\textsuperscript{a}  29.207 + 3.611
Colleg\textsuperscript{b}  25.514 + 4.697
SDE\textsuperscript{c}  23.332 + 5.144
Collab & Colleg  25.032 + .554 + 4.298
Collab & SDE   22.418 + .768 + 4.686
Colleg & SDE   22.185 + 1.675 + 3.877
Collab & Colleg & SDE  .076 + .142 + 1.586 + 3.859

\textit{Note.} \textsuperscript{a}Collab is collaboration. \textsuperscript{b}Colleg is collegiality. \textsuperscript{c}SED is self-determination/efficacy

Strong relationships were found using collaboration, collegiality, and self-determination/efficacy in the sixth, seventh, and eighth. For sixth grade, 13.1\% of the variance was explained. The regression equation was: \text{FCAT} = 27.807 + .404 (collaboration) + 1.382 (collegiality) + 3.154 (self-determination/efficacy). For seventh grade, 17.2\% of the variance was explained. The regression equation was: \text{FCAT} = 23.664 + .606 (collaboration) + 1.996 (collegiality) + 3.512 (self-determination/efficacy). For eighth grade, 15\% of the variance was explained. The regression equation was: \text{FCAT} = 14.758 - .583 (collaboration) + 1.380 (collegiality) +
4.911 (self-determination/efficacy). The analysis demonstrated that the percentage of sixth, seventh, and eighth grade students scoring at level 3 and above on the 2004-2005 FCAT reading could be predicted from the culture scores on the Modified School Culture Triage Survey.

**Summary**

An analysis of the data obtained from the respondent schools on the Modified School Culture Triage Survey given in May 2005, along with data from the 2004-2005 reading portion of the FCAT, has been presented in this chapter. Data analyses for each of the three research questions were presented. Results of the statistical tests, including tables, figures, and supporting narratives were also displayed.

A summary and discussion of these findings are presented in Chapter 5. Conclusions drawn from this research are presented, as well as recommendations for administrative practice and future research.
CHAPTER 5
SUMMARY, CONCLUSIONS, AND RECOMMENDATIONS

Problem Statement
This quantitative study was conducted to: (a) determine to what extent middle schools scoring in the top half and bottom half on the Modified School Culture Triage Survey differed on various demographic items; (b) determine what differences, if any, existed between the cultures of middle schools as measured by the Modified School Culture Triage Survey and student achievement; and (c) determine what relationships, if any, existed among the three key areas of middle school culture (collaboration, collegiality, and self-determination/efficacy) and student achievement.

Methodology
Population and Data Collection
The population of this study was comprised of instructional personnel. The faculty members were employed at one of the six participating middle schools in Osceola County School District, Kissimmee, Florida during the 2004-2005 school year. One middle school chose not to participate in this study.

The survey instruments were sent to the reading coaches of the six participating middle schools through the school system courier service on May 16, 2005. A cover letter requested that the surveys be completed by each instructional staff member and
returned to the researcher via the school system courier service by May 23, 2005. The first contact of the prenotice letter and second contact of the cover letter and survey yielded a return rate of 66%. The third contact returned 28 more surveys, which yielded a return rate of 72%. A fourth contact was made to the remaining instructional personnel. Twenty more surveys were returned, yielding a return rate of 77%. The fifth and final contact yielded an additional 20 surveys. A total of 352 out of 431 surveys were returned, which gave a return rate of 82%. Of the 352 surveys returned, 343 were able to be used, which yielded a usable return rate of 80% from the six participating middle schools.

**Instrumentation**

Data were collected using the survey instrument, *Modified School Culture Triage Survey*, which in its original form, was developed by Wagner and Masden-Copas (2002). The original instrument was entitled: *Self Assessment: School Culture Triage* and was designed to determine the current conditions of school cultures. The survey instrument in this study was further modified from Cunningham’s (2003) *School Culture Survey*. With permission from both authors (see Appendix G and H), the researcher revised the instrument to include an additional demographic item. The additional demographic item asked the instructional personnel to write in their job title.

The final survey instrument consisted of four sections: (a) five questions on collaboration; (b) seven questions on collegiality; (c) six questions on
self-determination/efficacy; and (d) six demographic questions. For the first three sections, respondents were asked to rate the extent to which the identified items were present in their school, using a five-point Likert scale (1 = Never; 2 = Rarely; 3 = Sometimes; 4 = Often; 5 = Always). The demographic data were used as variables in the data analysis. Survey items 1-5 measured professional collaboration; 6-12 measured collegiality; and 13-18 measured self-determination/efficacy. Survey items 19-24 requested demographic information on: (a) total years teaching experience; (b) number of years teaching at the present school; (c) ethnicity; (d) gender; (e) current grade level; and (f) job title.

Data Analysis

The researcher completed all analyses of the collected data. The surveys were collected and sorted by school using the six digit identifying school number printed on each survey. Responses for the 18 survey items were translated into numerical scores for each survey item using a five-point Likert scale: 1 = Never; 2 = Rarely; 3 = Sometimes; 4 = Often; and 5 = Always. Overall school totals were determined for each survey item and mean scores by item were obtained by totaling each school’s score for each survey item and dividing by the number of respondents. This resulted in a mean score for each of the respondent schools.

Data from the 2004-2005 Florida Comprehensive Assessment Test (FCAT) reading portion were obtained from the Florida Department of Education website (http://www.fldoe.org) for each respondent school. The percentages of students scoring at level 3 and above on the 2004-2005 FCAT reading were used in the analysis of data.
Summary and Discussion of Findings

The summary and a discussion of the findings for the collected data in response to the three research questions for this study were as follows:

Research Question 1

To what extent do middle schools scoring in the top half and bottom half on the Modified School Culture Triage Survey differ on: (a) average total years of teaching experience of the faculty; (b) average total years of teaching experience of the faculty at the present school; (c) ethnic composite of the faculty; and (d) gender composite of the faculty?

The responding schools were divided into two groups based on their school’s scores on the Modified School Culture Triage Survey. The responding schools were grouped as follows: top half on the Modified School Culture Triage Survey scores (N = 3) and bottom half on the Modified School Culture Triage Survey scores (N = 3). Descriptive statistics were calculated for each group on all variables: average total years of teaching experience of the faculty, average total years of teaching experience of the faculty at the present school, ethnic composite of the faculty, and gender composite of the faculty. The researcher also asked the instructional personnel to respond to a question on what grade level they taught and what their job title was. That information was provided too.

The participating schools had the following teacher response rates: the schools that scored on the top half on the Modified School Culture Triage Survey (N = 3) had 176 respondents while those schools that scored on the bottom half (N = 3) had 167 respondents. When the variable total years teaching experience was considered, the schools within the top half had similar percentages to the schools within the bottom half.
in the 2 or less, 3-5, and 6-8 years experience. In each of these categories, the difference was only 1% ($n$ varied between three and four respondents). When it came to the category of teachers with 9-11 years of teaching experience, schools within the bottom half had 10% ($n = 17$), while schools within the top half had 5% ($n = 8$). In the 12 or more years of experience category range, there was also a 5% difference, but it favored schools within the top half. The schools in the top half averaged 38% ($n = 67$) of the teachers who had 12 or more years total teaching experience. Schools within the bottom half had 33% ($n = 55$) teachers with 12 or more years total teaching experience.

When the researcher studied the data related to the variable years of teaching experience at the present school, there were differences noted in each of the categories. Schools within the top half on the Modified School Culture Triage Survey had 47% ($n = 82$) of their instructional personnel with 2 or less years experience at their schools, while schools within the bottom half had 39% ($n = 64$). For the category 3-5 years, the bottom half schools had a greater percentage of their instructional personnel, 34% ($n = 56$), compared to schools in the top half 22% ($n = 39$). The bottom half schools also had a larger percentage of teachers in the 6-8 years category, 16% ($n = 27$) compared to 10% ($n = 17$). Schools within the top half had more experienced teachers in the 9-11 years category and 12 or more years category. In the 9-11 years category, schools within the top half had 8% ($n = 14$) while schools within the bottom half had 5% ($n = 8$). In the 12 or more years category, schools within the top half had twice as many experienced instructional personnel than those in the bottom half, 14% ($n = 24$) compared to 7%
These findings correlate with other research, which determined that collaboration might have affected teacher retention over the long term. Teacher retention has been and will continue to be a critical challenge for education. Schools have been able to hire teachers with varying degrees of educational knowledge and preparedness and from non-traditional teacher education programs to keep up with the demand (Johnson & Kardos, 2002). But, as schools continue to struggle to fill teaching positions, according to The No Child Left Behind Act of 2001, every teacher must meet the requirements to be highly qualified by June 30, 2006.

In order to answer the question regarding the extent that schools differ on the demographic variable of ethnic diversity of the faculty, the participating respondents selected from one of the five categories of ethnic diversity: African American, Asian, Caucasian, Hispanic, and Other. Schools scoring within the top half on the Modified School Culture Triage Survey had teachers who were 4% \((n = 6)\) African Americans, 0% \((n = 0)\) Asian, 83% \((n = 141)\) Caucasians, 9% \((n = 16)\) Hispanics, and 4% \((n = 6)\) Other. Schools scoring within the bottom half on the Modified School Culture Triage Survey had teachers who were 16% \((n = 25)\) African Americans, 1% \((n = 1)\) Asian, 48% \((n = 78)\) Caucasians, 26% \((n = 42)\) Hispanics, and 9% \((n = 15)\) Other.

Schools with school cultures scores within the bottom half had almost half as many Caucasian instructional personnel as those schools scoring within the top half, 48% \((n = 78)\) versus 83% \((n = 141)\). When reversing the categories, the schools within the bottom half had four times more African American instructional personnel than schools within the top half, 16% \((n = 25)\) versus 4% \((n = 6)\). Also, schools within the bottom half
had almost three times more Hispanic instructional personnel than schools within the top half, 26% (n = 42) versus 9% (n = 16), and twice as many Other, 9% (n = 15) versus 4% (n = 6). The percentages of Asian remained fairly constant for both groups, with a 1% variance (n varied between zero and one respondent). It could not be determined from the data whether the ethnicity of the faculty contributed to the positive culture, whether the positive culture contributed to the ethnicity of the faculty, or whether the ethnicity of the faculty resulted from other factors.

When considering the variable of gender, schools scoring within the top half on the Modified School Culture Triage Survey had 76% (n = 133) female faculty and 25% (n = 41) male faculty. Schools scoring within the bottom half on the Modified School Culture Triage Survey had 72% (n = 118) female faculty and 28% (n = 47) male faculty. The percentage of both female and male faculty remained fairly constant between the two groups, with a 3-4% variance.

When the researcher looked at the variable of grade level of the instructional personnel, schools scoring within the top half on the Modified School Culture Triage Survey had 23% (n = 39) sixth grade, 18% (n = 31) seventh grade, 23% (n = 40) eighth grade, and 36% (n = 63) mixed grades. Schools scoring within the bottom half on the Modified School Culture Triage Survey had 22% (n = 35) sixth grade, 19% (n = 29) seventh grade, 18% (n = 30) eighth grade, and 42% (n = 68) mixed grades. The percentage for sixth grade, seventh grade, and eighth grade remained fairly constant for both groups (1-5% variance). There was a slightly larger variance, 6%, when it came to mixed grades, with the bottom half having more instructional personnel that taught mixed
grades. In both groups, the percentage was greater because elective and exceptional student education teachers teach all or a combination of all three grades.

In order to answer the question regarding the extent that schools differ on the demographic variable of job title of the faculty, the participating respondents were asked to write their job title on the line provided. The researcher then categorized them as follows: language arts, math, reading, science, social studies, elective, exceptional student education (ESE), and other. Schools scoring within the top half on the Modified School Culture Triage Survey had greater percentages of instructional personnel than schools scoring within the bottom half in language arts, 16% (n = 20) versus 13% (n = 16); reading, 13% (n = 16) versus 7% (n = 9); and elective, 19% (n = 23) versus 12% (n = 15). Schools scoring within the bottom half had greater percentages than schools scoring in the top half on the Modified School Culture Triage Survey in math, 13% (n = 16) versus 7% (n = 9); science, 13% (n = 16) versus 11% (n = 14); social studies, 11% (n = 14) versus 10% (n = 13); ESE, 18% (n = 22) versus 15% (n = 18); and other, 14% (n = 17) versus 9% (n = 11). The top half had a larger percentage of students scoring at level 3 and above on the 2004-2005 FCAT reading and had larger percentages of teachers teaching language arts and reading.
Research Question 2

What differences, if any, exist between the overall cultures of middle schools as measured by the *Modified School Culture Triage Survey* and student achievement as measured by the percentage of middle school students scoring at level 3 and above on the 2004-2005 FCAT reading?

The responding schools were divided into two groups based on their school’s scores on the *Modified School Culture Triage Survey*. The responding schools were grouped as follows: top half on the *Modified School Culture Triage Survey* scores ($N = 3$) and bottom half on the *Modified School Culture Triage Survey* scores ($N = 3$). The three top schools had 51% ($n = 1261$) of sixth grade, 53% ($n = 1276$) of seventh grade, and 44% ($n = 1334$) of eighth grade students score at level 3 and above on the 2004-2005 reading portion of the FCAT. The three schools in the bottom had 37% ($n = 1170$) of sixth grade, 34% ($n = 1255$) of seventh grade, and 23% ($n = 1276$) of eighth grade students score at level 3 and above on the 2004-2005 reading portion of the FCAT.

A t-test revealed that there were statistically significant differences in the sixth, seventh, and eighth grade FCAT reading scores between the middle schools scoring in the top half and the bottom half on school culture as measured by the *Modified School Culture Triage Survey* and student achievement ($p < .01$). The data indicated a relationship between the culture of schools as measured by the *Modified School Culture Triage Survey* and student achievement as measured by the percentage of students scoring at level 3 and above on the 2004-2005 reading FCAT in the sixth, seventh, and eighth grade.

A nested ANOVA was conducted so the researcher could accommodate for the schools and the instructional personnel already being in tact for the 2004-2005 school
The interaction between schools scoring in the top and bottom half on the Modified School Culture Triage Survey and collaboration accounted for 17.7% of the variance, collegiality accounted for 21.4% of the variance, self-determination/efficacy accounted for 21.6% of the variance, sixth grade FCAT accounted for 66.3% of the variance, seventh grade FCAT accounted for 94% of the variance, and eighth grade FCAT accounted for 97.8% of the variance.

The results showed that schools reporting higher culture scores had higher FCAT reading scores. Conversely, schools reporting lower culture scores had lower FCAT reading scores. The findings of this study seem to indicate a culture-test performance link and add to the body of research, which supports the assertion, that collaborative, collegial school cultures contribute to improved student achievement as measured by standardized tests (Deal & Kennedy, 1999).

Research Question 3

What relationships, if any, exist among the three key areas of middle school culture (collaboration, collegiality, and self-determination/efficacy) and student achievement?

After multiple regression analyses, statistically significant relationships were found between the dependent variable of sixth, seventh, and eighth grade FCAT reading scores and the independent variable of collaboration, collegiality, and self-determination/efficacy. The relationship was considered to be strong in sixth grade, with 13.1% of the variance explained. The regression equation was: FCAT = 27.807 +
.404 (collaboration) + 1.382 (collegiality) + 3.154 (self-determination/efficacy). For seventh grade, the relationship was found to be strong, with 17.2% of the variance explained. The regression equation was: FCAT = 23.664 + .606 (collaboration) + 1.996 (collegiality) + 3.512 (self-determination/efficacy). The relationship was considered to be strong in eighth grade, with 15% of the variance explained. The regression equation was: FCAT = 14.758 - .583 (collaboration) + 1.380 (collegiality) + 4.911 (self-determination/efficacy).

The results showed that the combination of collaboration, collegiality, and self-determination/efficacy largely impacts student achievement. Again, the research showed that schools reporting higher school culture scores had higher FCAT reading scores. Conversely, schools reporting lower school culture scores had lower FCAT reading scores. These conclusions were consistent with other findings in the literature. These findings add to the body of research, which supports the declaration that collaboration, collegiality, and self-determination/efficacy contribute to improved student achievement (Wagner & Masden-Copas, 2002).

Conclusions

This study sought to determine: (a) to what extent participating grouped schools differed on various demographics; (b) what differences, if any, existed between the cultures of selected Florida middle schools and student achievement; and (c) what relationships, if any, existed among the three key areas of school culture (collaboration, collegiality, and self-determination/efficacy) and student achievement. Based on a review of related literature and the research findings, it was concluded that:
1. The schools that scored in the top half on the Modified School Culture Triage Survey had more experienced instructional personnel, as demonstrated by a higher percentage of teachers who had 12 or more total years teaching experience.

2. The schools that scored in the top half on the Modified School Culture Triage Survey had a more stable faculty and a higher retention rate of their instructional personnel, as demonstrated by a higher percentage of teachers who taught at the present school in both the 9-11 years category and the 12 or more years category.

3. The schools that scored in the top half on the Modified School Culture Triage Survey had a much higher percentage of Caucasian teachers who taught at the present school.

4. The schools that scored in the top half on the Modified School Culture Triage Survey focused on literacy, as demonstrated by having higher percentages of teachers teaching language arts and reading.

5. There was a statistically significant relationship between the culture of the middle schools in this study and the reading achievement of students, as measured by the FCAT reading. In particular, those schools that scored higher on the Modified School Culture Triage Survey had higher percentages of sixth, seventh, and eighth grade students scoring at level 3 and above on the 2004-2005 reading FCAT. Those schools with lower scores on the Modified School Culture Triage Survey had lower
percentages of sixth, seventh, and eighth grade students scoring at level 3 and above on the 2004-2005 reading FCAT.

**Implications and Recommendations**

Peterson (2002a) contended that school culture was an important variable when considering standards-based reform efforts. With the increased focus on higher curriculum standards and accountability, school administrators must consider all variables when attempting to increase student achievement. According to Blase and Blase (2001a), collaboration among faculty was one of the best means for instructional improvement. Studies have indicated that school cultures vary considerably from one site to the next (Bolman & Deal, 1992). However, there have not been many studies available which determine the relationships between school culture, as defined by collaboration, collegiality, and self-determination/efficacy and student achievement. The present study was developed to determine if such a relationship exists.

Strong relationships were identified in the present study between the level of school culture (collaboration, collegiality, and self-determination/efficacy) of the faculty and student achievement. In specific terms, middle schools that scored in the top half on the *Modified School Culture Triage Survey* had higher percentages of students scoring at level 3 and above on the 2004-2005 reading FCAT. Conversely, middle schools that scored in the bottom half on the *Modified School Culture Triage Survey* had lower percentages of students scoring at level 3 and above on the 2004-2005 reading FCAT. These findings hold strong implications for middle school administrators.
Middle school administrators should become aware of the relationship between middle school culture and student achievement and begin to seek ways to build more collaborative and collegial school environments. According to Lewin and Regine (2000), “in this world, interactions, or relationships, among its agents are the organizing principle” (p. 19). Administrators should begin by asking what a collegial school environment would look like and what structures and actions currently support and reinforce such an environment?

The conclusions drawn from this study, based on the analysis of the statistical procedures used, strongly suggest that increased student achievement was related to the degree of positive school culture found throughout the school. Therefore, it is recommended that graduate programs in educational leadership include the importance of school culture and how to build and maintain collaborative and collegial environments. Teacher undergraduate courses emphasize many areas of professional competencies, but there does not seem to be coursework designed specifically to address school culture.

It is recommended that the accountability and staff development practices of school districts include ways to encourage and support positive school cultures. The culture approach to staff development emphasizes teams of professionals working together. The focus should be on teaming and collaboration. Meaningful, collaborative activities could be planned and faculty could be encouraged to engage in more collegial interactions in order to promote positive, professional learning communities within the schools. In turn, the teachers’ sense of efficacy would be closely related to the levels of teacher collaboration found throughout the school. In schools with high degrees of
teaming and efficacy, teachers would be more likely to work together for the improvement of student achievement. It is recommended that attention and support be placed on continued monitoring of school culture and culture building activities in order for student achievement to improve in the school.

When examining the grouped schools within the bottom half on the Modified School Culture Triage Survey, it was noted that many of the schools were in an urban setting. Schools within an urban setting face unique challenges. They often carry burdens of poverty, poor housing, and an uninvolved local community structure (Peterson, 2002b). Therefore, it is recommended that school districts pay close attention to the culture within urban schools. School districts should actively seek individuals with knowledge and skills in the areas of collaboration, collegiality, and team building when selecting an administrator. Assistance and support should be given to existing administrators related to developing and maintaining collegial environments. Also, district personnel should implement strategic plans that include fiscal resources and support, on-going staff development opportunities, and recognition and reward opportunities.

Emphasis is being placed on data driven decision-making and best practices in curriculum and instruction. In this present study, it was concluded that there was a relationship between the culture of the middle schools and the reading achievement of students in those schools. In particular, those schools with higher scores on the Modified School Culture Triage Survey had higher percentages of students scoring at level 3 and above on the 2004-2005 reading FCAT. Those schools with lower scores on the
Modified School Culture Triage Survey had lower percentages of students scoring at level 3 and above on the 2004-2005 reading FCAT. Therefore, it is recommended that school administrators gather data on their school culture, study it, and create an action plan for improvement. School culture data could be gathered with the survey used in this study or another culture survey. Knowing and using data related to the culture of their own school will assist administrators in accomplishing school improvement efforts.

Recommendations for Future Research

Future research needs were identified using the data analyses from this present study. Future needs include:

1. Conducting a similar study, but adding a research focus to include demographic characteristics also, such as highest degree earned and certification, to quantify teacher characteristics in the schools.

2. Studying the practices of sixth, seventh, and eighth grade teachers related to reading to determine the cause of the decreasing reading performance year after year.

3. Repeating this study using a population of elementary or high school instructional personnel within the same school district.

4. Repeating this study using a population of elementary, middle, or high school instructional personnel in a different school district.

5. Repeating this study using a larger population of instructional personnel, such as multiple school districts or state populations.

6. Repeating this study researching the student demographics at each middle
school.

7. Repeating this study using a different culture instrument to measure school culture.

8. Repeating this study using a different area of student achievement, such as math, writing, or science.

9. Repeating this study in three years within the same school district to determine if similar results would be obtained.

10. Conducting this study as a qualitative investigation to include interviews with middle school instructional personnel in both the top and bottom half in order to determine if the school culture matches what was detailed in the present study.

11. Conducting this study using a population of principals to determine if perceptions of school culture are similar to those obtained from the instructional personnel.

12. Conducting this study in other organizations, such as higher education institutions or businesses, to determine to what extent, if any, culture impacts those organizations.
May 16, 2005

Karen Vislocky
2141 The Oaks Blvd.
Kissimmee, FL 34746

A few days from now you will receive in your mailbox a request to fill out a brief questionnaire for an important research study being conducted by a doctoral student from the University of Central Florida.

It concerns your experiences as instructional personnel at your middle school.

I am writing to you in advance because it has been found that many people like to know ahead of time that they will be contacted. The study is an important one because it has the potential to improve student achievement in Osceola County.

Thank you for your time and consideration. It is only with the generous help of people like you that this research will be successful. I would greatly appreciate if you would respond when the questionnaire arrives.

Sincerely,

Karen Vislocky
Assistant Principal

P.S. I will be enclosing a small token of appreciation with the questionnaire as a way of saying thank you.
APPENDIX B
SECOND CONTACT SURVEY COVER LETTER
May 18, 2005

Dear Colleague:

I am a doctoral student at the University of Central Florida and the Assistant Principal at Kissimmee Middle School. As part of my research, I am conducting a survey. The purpose of the survey is to learn about the impact of school culture on student achievement in middle schools in Osceola County, particularly how educators perceive the levels of collaboration, collegiality, and self-determination/efficacy in their schools.

I am asking that you participate in this survey because you are employed at a middle school in Osceola County during the 2004-2005 school year and were randomly selected to participate. The survey should take no longer than 10 minutes to complete. You will not have to answer any question you do not wish to answer. All information will be kept confidential.

There are no anticipated risks, compensation or other direct benefits to you as a participant in this survey. You are free to withdraw or discontinue your participation at any time without consequence.

If you have any questions about this research project, please contact me at (407) 870-0857, ext. 1165. My faculty supervisor is Dr. George Pawlas. He can be contacted at (407) 823-1472. Questions of concerns about research participants’ rights may be directed to the UCFIRB office, University of Central Florida Office of Research, Orlando Tech Center, 12443 Research Parkway, Suite 207, Orlando, FL 32826. The phone number is (407) 823-2901.

Once you have completed your survey, please turn it in to the reading coach’s mailbox. She will return the completed surveys to me. By returning the completed survey, you give me permission to report your responses anonymously in my final research document. Please note that your answers will remain strictly confidential and will not affect your job performance evaluation in any way.

Attached to your survey is a one-dollar bill. Whether you choose to answer the survey questions or not, please take the dollar as a token of my appreciation. Thank you for your time.

Sincerely,

Karen Vislocky
Assistant Principal
Kissimmee Middle School
APPENDIX C

SURVEY
MODIFIED SCHOOL CULTURE TRIAGE SURVEY

Directions: Please rate each survey item relative to its PRESENCE in your school. For each item, please circle the appropriate response.

<table>
<thead>
<tr>
<th>START HERE:</th>
<th></th>
<th>Never</th>
<th>Rarely</th>
<th>Some times</th>
<th>Often</th>
<th>Always</th>
</tr>
</thead>
<tbody>
<tr>
<td>In our school:</td>
<td></td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>1. Teachers and staff discuss instructional strategies and curriculum issues.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2. Teachers and staff work together to develop the school schedule.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3. Teachers and staff are involved in the decision-making process with regard to materials and resources.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4. The student behavior code is a result of collaboration and consensus among staff.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5. The planning and organizational time allotted to teachers and staff is used to plan as collective units/teams rather than as separate individuals.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>6. Teachers and staff tell stories of celebrations that support the school's values.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>7. Teachers and staff visit/talk/meet outside of the school to enjoy each other's company.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>8. Our school reflects a true &quot;sense&quot; of community.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>9. Our school schedule reflects frequent communication opportunities for teachers and staff.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Page 1

Please continue on the next page
Directions: Please rate each survey item relative to its PRESENCE in your school. For each item, please circle the appropriate response.

**CONTINUE HERE:**

<table>
<thead>
<tr>
<th></th>
<th>Never</th>
<th>Rarely</th>
<th>Some times</th>
<th>Often</th>
<th>Always</th>
</tr>
</thead>
<tbody>
<tr>
<td>10. Our school supports and appreciates the sharing of new ideas by members of our school.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>11. There is a rich and robust tradition of rituals and celebrations, including holidays, special events, and recognition of goal attainment.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>12. Teachers and staff respect and appreciate each other's specific talents.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>13. When something is not working in our school, the faculty and staff predict and prevent rather than react and repair.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>14. School members are interdependent and value each other.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>15. Members of our school community seek alternatives to problems/issues rather than repeating what we have always done.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>16. Members of our school community seek to define the problem/issue rather than blame others.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>17. The school staff is empowered to make instructional decisions rather than waiting for the supervisors to tell them what to do.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>18. People work here because they enjoy it and choose to be here.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
</tbody>
</table>
Directions: Please respond to each demographic item by putting an X in the appropriate box.

**CONTINUE HERE:**

19. How many total years teaching experience do you have?  
   - □ 2 or less  
   - □ 3 - 5  
   - □ 6 - 8  
   - □ 9 - 11  
   - □ 12 or more

20. How many years have you been teaching at this school?  
   - □ 2 or less  
   - □ 3 - 5  
   - □ 6 - 8  
   - □ 9 - 11  
   - □ 12 or more

21. What is your ethnicity?  
   - □ African American  
   - □ Asian  
   - □ Caucasian  
   - □ Hispanic  
   - □ Other

22. What is your gender?  
   - □ Female  
   - □ Male

23. What grade level do you teach?  
   - □ 6th  
   - □ 7th  
   - □ 8th  
   - □ Mixed

24. What is your job title?

**Directions:** Please use this space to write in any additional comments.

---

Thank you for your time in completing this survey.  
Please return the survey to the contact person by May 23, 2005.
May 23, 2005

Last week a questionnaire seeking your experience and opinions about teaching at a middle school in Osceola County was placed in your mailbox.

If you have already completed and returned the questionnaire to me, please accept my sincere thanks. If not, please do so today. I am especially grateful for your help because it is only asking people like you to share your experiences that I can understand if a positive school culture impacts student achievement.

If you did not receive a questionnaire, or if it was misplaced, please call me at 407-870-0857 ext. 1165 and I will get another one out to you today.

Thank you for your time.

Karen Vislocky, Assistant Principal
Kissimmee Middle School
2410 Dyer Blvd.
Kissimmee, FL 34741
APPENDIX E

FOURTH CONTACT LETTER
May 31, 2005

Karen Vislocky
2141 The Oaks Blvd.
Kissimmee, FL 34746

About three weeks ago I sent a questionnaire to you that asked about your experiences working in a middle school in Osceola County. To the best of my knowledge, it has not yet been returned.

The comments of people who have already responded include a continuum of collaboration, collegiality, and self-determination/efficacy. Many have described the positive and negative experiences at their school. I think the results are going to be very useful to Osceola County and other school districts.

I am writing again because of the importance that your questionnaire has for helping to get accurate results. Although I sent questionnaires to instructional personnel at each of the seven middle schools in Osceola County, it is only by hearing from nearly everyone in the sample that I can be sure that the results are truly representative.

A few people have written to say that they should not have received the questionnaire because they are not employed at a middle school. If this applies to you, please let me know on the cover of the questionnaire and return it so that I can delete your name from the mailing list.

A comment on my survey procedures: A questionnaire identification number is printed on the back cover of the questionnaire so that I can check your name off of the mailing list when it is returned. The list of names is then destroyed so that individual names can never be connected to the results in any way. Protecting the confidentiality of people’s answers is very important to me.

I hope that you will fill out and return the questionnaire soon, but if for any reason you prefer not to answer it, please let me know by returning a note or blank questionnaire.

Thank you for your time.

Sincerely,

Karen Vislocky
Assistant Principal

P.S. If you have any questions, please feel free to contact me. The phone number where I can be reached is (407) 870-0857 ext. 1165.
APPENDIX F

FIFTH CONTACT LETTER
June 6, 2005

Karen Vislocky
2141 The Oaks Blvd.
Kissimmee, Fl  34746

During the last month I have sent you several mailings about an important research study I am conducting as a doctoral student at the University of Central Florida.

Its purpose is to help Osceola County improve student achievement by understanding the link between school culture and student achievement.

The study is drawing to a close, and this is the last contact that will be made with the random sample of instructional personnel who work at one of the seven middle schools in Osceola County.

I am sending this final contact by priority mail because of my concern that people who have not responded may have had different experiences than those who have. Hearing from everyone in this small county sample helps assure that the survey results are as accurate as possible.

I also want to assure you that your response to this study is voluntary, and if you prefer not to respond that is fine. If you are not employed at a middle school and you feel that I have made a mistake including you in this study, please let me know by returning the blank questionnaire with a note indicating so. This would be very helpful.

Finally, I appreciate your willingness to consider my request as I conclude this effort to better understand school culture and student achievement. Thank you very much.

Sincerely,

Karen Vislocky
Assistant Principal
APPENDIX G

PERMISSION TO REVISE INSTRUMENT
April 25, 2005

Ms. Karen Vislocky  
Assistant Principal  
Kissimmee Middle School  
2410 Dyer Blvd.  
Kissimmee, FL 34741  

Dear Ms. Vislocky:

I am delighted and honored that you have considered using the School Culture *Triage* Survey for your study. You have my permission to use the survey. I will be sending you an email explaining some of the lessons we have learned while administering this measurement.

I wish you the best in your research.

Kindest regards,

Christopher R. Wagner, Ph.D.  
President  
Center for Improving School Culture

www.schoolculture.net
APPENDIX H

PERMISSION TO REVISE INSTRUMENT
Monday, September 27, 2004 9:19:33 AM

Message

From: "Cunningham, Brenda C." <cunninb@ocps.k12.fl.us>

Subject: RE: dissertation

To: "Karen Vislocky"

Karen:

You have my permission to use the School Culture Survey and adapt it for your study. I surveyed elementary teachers in all of the OCPS elementary schools.

----Original Message----
From: Karen Vislocky [mailto:vislockk@osceola.k12.fl.us]
Sent: Tuesday, September 21, 2004 9:51 AM
To: Cunningham, Brenda C.
Subject: dissertation

Hi Dr. Cunningham! I apologize for taking so long to get in touch with you regarding a letter stating the I can replicate your study and use and modify your culture survey instrument. But, I have been going back and forth between measuring climate or culture. I've finally decided to replicate your study. So, if you write a letter giving me permission to use and modify your culture survey, I would greatly appreciate that.

Also, did you survey just instructional personnel?

I appreciate your help,
Karen Vislocky
Assistant Principal
Kissimmee Middle School
APPENDIX I

PERMISSION FOR HUMAN SUBJECTS IRB APPROVAL
April 8, 2005

Karen Vislocky
2141 The Oaks Blvd.
Kissimmee, FL 34746

Dear Ms. Vislocky:

With reference to your protocol #05-2514 entitled, "The Relationship between School Culture and Student Achievement in Middle Schools" I am enclosing for your records the approved, expedited document of the UCFIRB Form you had submitted to our office. **The expiration date for this study will be 4/6/06.** Should there be a need to extend this study, a Continuing Review form must be submitted to the IRB Office for review by the Chairman or full IRB at least one month prior to the expiration date. This is the responsibility of the investigator. **Please notify the IRB when you have completed this study.**

Please be advised that this approval is given for one year. Should there be any addendums or administrative changes to the already approved protocol, they must also be submitted to the Board through use of the Addendum/Modification Request form. Changes should not be initiated until written IRB approval is received. Adverse events should be reported to the IRB as they occur.

Should you have any questions, please do not hesitate to call me at 407-823-2901.

Please accept our best wishes for the success of your endeavors.

Cordially,

[Signature]

Barbara Ward, CIM
IRB Coordinator

Copy: IRB file
LIST OF REFERENCES


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