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AN ANALYSIS AND COMPARISON OF SCHOOL CULTURE
WITH ACADEMIC ACHIEVEMENT OF MIDDLE SCHOOL
STUDENTS WITH SPECIFIC LEARNING DISABILITIES

by

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A dissertation submitted in partial fulfillment of the requirements
for the degree of Doctor of Education
in the Department of Educational Research, Technology and Leadership
in the College of Education at the University of Central Florida
Orlando, Florida

Fall Term
2004

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ABSTRACT

This study was developed to generate data about the overall culture of selected Central Florida middle schools in Osceola County. It was designed to enhance the existing body of knowledge on collaboration, collegiality and self-efficacy, as related to the academic achievement of students with specific learning disabilities. This study focused on two research questions: (a) to determine how well the three key areas of school culture (collaboration, collegiality and teacher efficacy) predict the placement of middle school students with specific learning disabilities in general education class or special education (resource and separate class) settings and (b) to determine what relationships (if any) exist between the three key areas of school culture (collaboration, collegiality and teacher efficacy) and FCAT Reading and Mathematics scores of middle school students with specific learning disabilities. Secondary analyses consisted of (a) analyzing and comparing the three areas of school culture across the selected schools and (b) analyzing and comparing FCAT Reading and Mathematics scores of middle school students with learning disabilities across general education, resource and separate class educational settings.

The population of this study consisted of seventh and eighth grade middle school students with specific learning disabilities during the 2003-2004 school year in the selected middle schools in Osceola County Public Schools, Kissimmee, Florida. To control for the high mobility rate, only those students who attended the same middle school since grade 6 were selected. Twenty-five general education and five exceptional education teachers were randomly selected from each of the four selected middle schools.

FCAT Reading comprehension and Mathematics problem solving percentile rank scores for all selected students with specific learning disabilities over a four-year period (2001 through 2004).

According to a review of professional literature and research findings, the researcher concluded that (a) none of the three key areas of school culture (collaboration, collegiality or teacher efficacy) predicted the placement of middle school students with specific learning disabilities in general education or special education (resource or separate class) educational settings and (b) there were no relationships between any of the three key areas of school culture and FCAT Reading and Mathematics scores for middle school students with specific learning disabilities in the sample population. Secondary analyses revealed (a) strong overall cultures in the selected middle schools, as overall culture scores in collaboration, collegiality and teacher efficacy ranged from the mid 2nd quartile to mid 3rd quartile; (b) statistically significant differences among the four schools of teacher perceptions of collaboration and teacher efficacy; (c) statistically significant differences between Reading and Mathematics FCAT scores for students in general education as opposed to those in resource or separate class placements. (No statistically significant differences were found between FCAT Reading and Mathematics scores of students in resource room or separate class placements.)

I would like to dedicate this study to my husband, Mario P. Quiambao and my daughters, Christine A. Quiambao and Jeanette E. Quiambao. Their loving support made this study possible. They reinforced a solid work ethic and the importance of persevering through difficult times.

ACKNOWLEDGEMENTS

Completing this study was made possible through the support, professionalism and guidance of my committee members: Dr. Douglas Magann, chairman, Dr. George Pawlas, Dr. Rosemary Taylor, Dr. Steven Sivo and Dr. Lee Cross. I genuinely appreciate their guidance, expertise and patience.

I would like to thank Susan Harris, Osceola County District Compliance Program Specialist, for her support and assistance in obtaining student data for my study. I would also like to thank my mentor, Cheryl Cassano, Assistant Principal at Celebration School for her support and encouragement through all phases of the dissertation. Last, I would like to thank Carrollyn Allen, my colleague, for her assistance and willingness during the survey distribution and collection phase of this study.

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CHAPTER 1
PROBLEM STATEMENT AND DESIGN COMPONENTS

Introduction

If schools are truly committed to satisfactorily educating all students, they must focus on the students in danger of falling through the cracks. These students may demonstrate racial or ethnic diversity, academic deficits, come from impoverished homes, or practice different religious or social customs. Students become discouraged with school, as learning experiences are not meaningful, or are not designed to meet their individual needs. Federal legislation, including the Elementary and Secondary Education Act, the Bilingual Education Act, Public Law 94-142, and the Individuals with Disabilities Education Act (IDEA) created parallel systems for remedial, compensatory, or special education services for students deemed unable to make adequate progress in general education programs. Probably the most disastrous consequence of creating parallel systems was the departmentalizing of the responsibility of educating such students. School leaders must assertively communicate that all students are valuable, are capable of learning, and can reap the optimal benefit when educated with their peers (Ainscow, 1991; Burrello, Lashley, & Beatty, 2001; Sage & Burrello, 1994).

Although the passage of Public Law 94-142 in 1975 mandated school districts to provide students with disabilities with a free and appropriate public education (FAPE) in the least restrictive environment (LRE), most school district policies did not provide

programs and services for students with disabilities in their local neighborhood schools. Sage and Burrello (1994) asserted common school district interpretation of this mandate was to provide students with minutes of direct services, as designated by their individualized needs. Consequently, school districts developed an array of programs and services to meet the needs of children with disabilities. Four prevailing assumptions implicit in educating disabled students were:

1. That there are pathological conditions explaining the student's deficits;
2. That differential diagnoses are required for the provision of individualized services;
3. That special education comprising a rational and coordinated system of services is required to meet individualized student needs; and
4. That incremental improvement in technology, diagnosis, and classroom interventions will meet each student's special needs (Skrtic, 1991).

Legislators and researchers in the 1980s advocated abolishing this parallel system in favor of the inclusive model. Burrello, Lashley and Beatty (2001) asserted the concept of mainstreaming was in vogue not because it was the most appropriate placement option for a majority of students with disabilities, but because it was morally and politically correct. The underlying premise for mainstreaming was that all children can learn and should attend the same neighborhood school as their siblings. Although Edmonds (1979) documented the statistically significant effect of the effective schools movement, he contended the field of special education was characterized by low teacher expectations, and the overlying assumption of the child's diagnosis of special education was used as an

excuse for school failure. Edmonds contended students respond to high expectations and, when provided with the proper context and educational environment, show positive learning outcomes. Smith and O'Day's study (as cited in Roach, Salisbury & McGregor, 2002) documented that standards-based reform was the prevailing paradigm for educational reform during the 1980s. During the following decade, Congress earmarked funding for standards-based reform through Goals 2000 and Title I of the Elementary and Secondary Education Act (ESEA, 1994). Both initiatives declared improved performance measures for all students and mandated that students with disabilities be taught in inclusive settings (Smith, 1997). Roach, et al documented that the importance of state departments of education to promulgate written inclusive policies corresponded directly to their funding formulas. The 1997 Amendments to the Individuals with Disabilities Education Act (IDEA) mandated increased school accountability, and that school districts provide students with disabilities greater access to the general education curriculum and state assessments (Amendments, 1997).

Students with disabilities benefit from merging the teaching technologies inherent in regular and special education practices including cooperative learning, collaboration, individualization, and parent involvement (Astuto & Clark, 1995; Bempechat, 1991; Burello, Lashley & Beatty, 2001; Davies, 1991). Furthermore, all teachers must access ongoing professional development opportunities to allow reflection of today's technology with respect to individual student strengths, and interests; and the changing demands in the school environment. Stainback and Stainback (1991) contended that children optimize their learning opportunities in integrated settings, develop sensitivity to one

another's diversity, and function more independently as adults. Equity requires educating disabled students in their home schools by providing a challenging environment, meaningful curricula and upholding high expectations (Stainback & Stainback).

Purpose

Since the publication of *A Nation at Risk* in 1983, school improvement efforts have primarily focused on accountability and improved student outcomes. The 1997 Amendments to the Individuals with Disabilities Education Act (IDEA) mandated that school districts provide students with disabilities access to the general education curriculum to the maximum extent possible. Recent educational research has begun to focus on the effect of school culture and the overall school climate on the academic achievement of students, especially those with disabilities (Allinder, 1995; Cunningham, 2003). However, the relationship between school culture, climate, and the achievement of students with disabilities has not been studied.

Statement of the Problem

The problem of this study will be to determine the effect of school culture (as measured by the School Culture Survey on: (a) the placement of middle school students with specific learning disabilities (SLD) and (b) the academic achievement of these students in Reading and Mathematics, as measured by their Florida Comprehensive Achievement Test (FCAT). This information will guide school administrators in the design of school restructuring plans to deliver effective exceptional student education.

Clarification of the Problem Statement

Definition of Terms

1. Exceptional Student Education (ESE) - special education programs and services in the State of Florida.
2. Inclusive Model – students with disabilities receiving instruction in the general education classroom along with non-disabled students.
3. Mainstreaming – the concept of integrating students with disabilities in the general education classroom, as opposed to separate, self-contained classrooms. The length of time students spend in the general education class is indicated on each student's IEP.
4. General class placement – students with disabilities who are educated with their non-disabled peers for at least 79% of the time. A student whose school week totals 1890 minutes, this figure represents at least 1,493 minutes per week.
5. Resource class placement – students with disabilities who are educated with their non-disabled peers for more than 40% of the time, but less than 79% of the time. A student whose school week totals 1890 minutes, this range represents between 756 to 1492 minutes per week. In middle school, a student's schedule reflects the specific subjects that a student receives instruction in the resource room.
6. Separate class placement – students with disabilities who are educated with their non-disabled peers for less than 40% of the time. A student whose school week totals 1890 minutes, this figure represents 755 minutes or less per week.

In middle school, students in separate class placements eat lunch with their age peers and receive general education instruction in one to two elective courses.

All other instruction is presented in the ESE classroom.

7. School Leaders – school principal, assistant principals, and district-level program specialists.
8. Collaboration – school leaders, general education and ESE teachers engaging in joint decision-making and problem solving to solve organizational and instructional problems.
9. Collegiality - interpersonal relationships among adults fostering empathy and an open and supportive work environment.
10. Personal / Teaching Efficacy – the feeling of ownership in students’ academic achievement. Teachers with high degrees of personal and teaching efficacy set higher annual goals for their students with disabilities (Allinder, 1995).
11. Florida Comprehensive Assessment Test (FCAT) – annual assessment of students in Florida public schools conducted each spring to students in grades 3-10 to assess their achievement in Reading, Writing and Mathematics. The FCAT contains two types of tests: the SSS, a criterion-referenced test to measure each student’s mastery the Florida Sunshine State Standards; and the NRT to compare the achievement of Florida students to others throughout the State of Florida.
12. School Culture – shared philosophies, ideologies, beliefs, feelings, assumptions, expectations, attitudes and values. When organizational members communicate

with one another, they speak a common language, use similar terminology and observe similar rituals and ceremonies (Bolman & Deal, 1997).

13. School Climate – “the heart and soul a school. It is about that essence of a school that leads a child, a teacher, an administrator, a staff member to love the school and to look forward to being there each day. *School Climate* is about that quality of a school that helps each individual feel personal worth, dignity and importance while simultaneously helping create a sense of belonging to something beyond ourselves...A school’s climate can define the quality of a school that creates healthy learning places, nurtures children’s and parents’ dreams and inspirations; stimulates teachers’ creativity and enthusiasm, and elevates all of its members” (Freiberg, 1999, p. 11).
14. Resource Compliance Specialist (RCS) – a job description unique to Osceola County, Florida. A school-based ESE teacher responsible for conducting all ESE initial staffings, IEP reviews, addressing parent concerns, providing teachers with resources, training and technical assistance to meet the needs of ESE students. The RCS is the school-based ESE compliance specialist.

Limitations and Delimitations

1. Data are delimited to those, which will be obtained from four middle schools in a large central Florida school district. Generalizations can be made only to this population. Further research is needed with larger sample sizes to generalize the results to larger populations.

2. Results are limited to seventh and eighth grade students with specific learning disabilities (SLD) who have attended their current school for at least two years.
3. This study seeks to determine how well school culture predicts (a) the placement of middle school students with SLD in general class or special education (resource and separate class) educational settings, and (b) the academic achievement of these middle school students with SLD. Extraneous variables, such as the effect of an extraordinary teacher on student achievement are not taken into account.
4. Response rates will dictate the reliability of the results and whether the assumptions of equal groups and equal variances for the analysis of variance statistical procedure can be met.
5. Results are delimited to the performance of seventh and eighth grade students with specific learning disabilities on the Reading and Mathematics FCAT.

Assumptions

1. It is assumed that the demographic composition of middle school students with specific learning disabilities in the sample is representative of all middle school students with disabilities in the Osceola County School District.
2. It is assumed that individuals will respond honestly and accurately to the questionnaire.

Significance of the Study

Taking into account the importance of contemporary school reform and the increased federal and state emphasis upon educational accountability, this study will collect data to determine the relationship, if any, between school culture and (a) placement of students with specific learning disabilities in general education, resource, and separate class placements, and (b) the academic achievement of students with specific learning disabilities. Results from this study could contribute to the body of professional literature and knowledge of the effect of collaboration, collegiality and efficacy / self-determination on the achievement of students with disabilities.

Research Questions

Questions guiding the research are as follows:

1. How well do the three key areas of school culture (collaboration, collegiality and teacher efficacy) predict the placement of middle school students with specific learning disabilities in general class or special education (resource and separate class) educational settings?
2. What relationships, if any, exist between each of the three key areas of school culture (collaboration, collegiality and teacher efficacy) and FCAT Reading and Mathematics scores of middle school students with specific learning disabilities?

Methodology

Population

The population for this study consisted of middle school students with specific learning disabilities in Osceola County School District, a large district in Central Florida. A representative sample of seventh and eighth grade students with specific learning disabilities was selected from four middle schools (grades 6 through 8). Only students who have been enrolled at the same middle school for at least two years and transitioned from an Osceola County elementary school were selected for the sample. A random selection of twenty-five general education teachers and five exceptional student education (ESE) teachers from each school completed the survey instrument. FCAT Reading and Mathematics percentile rank scores were recorded for all students with specific learning disabilities in grades seven and eight. Mean FCAT percentile rank scores in Reading Comprehension and Mathematics Problem Solving from 2001, 2002, 2003 and 2004 were recorded for seventh grade and eighth grade students.

Data Collection Procedures

The School Culture Survey was modified with permission from Cunningham (2003) and Wagner and Masden-Copias (2002). A modified tailored design method (Dillman, 2000) was used to achieve high response rates. The Resource Compliance Specialist (RCS) at each school site received a letter describing the scope and importance of the study and requesting his / her participation in the study. Those who agreed to participate in the study personally received sealed envelopes for all survey participants

for that school consisting of the prenotice letters (describing the purpose of the research and requesting their participation) and survey instruments for distribution in each participant's mailbox. The names of general education teachers were selected using random sampling from a database at Osceola County public Schools. Each survey was assigned a number to identify the school and survey participant.

The prenotice letter was distributed on Monday, May 3, 2004, while the survey instrument was distributed on Wednesday, May 5, 2004. An Excel database was used to track the returned and unreturned surveys for further follow-up. Each survey participant received a thank you letter or reminder on Monday, May 17, 2004 through Interoffice Mail. Replacement surveys were mailed to all nonrespondents on Thursday, May 20, 2004. A multi-modal approach was used after four weeks to increase the response rate. Telephone and email were used to contact nonresponders. Each participating RCS received a token of appreciation consisting of a complementary lunch at a local restaurant. Survey participants received a token of appreciation consisting of a crisp, new one-dollar bill with the survey instrument.

The independent variables were ESE class placement and school culture while the dependent variable was FCAT Reading and Mathematics scores of middle school students with specific learning disabilities. Descriptive statistics were used to describe and compare relationships between (a) three key areas of school culture (collaboration, collegiality and teacher efficacy); FCAT Reading and Mathematics percentile rank scores; and (c) placement of students with specific learning disabilities into regular, resource or separate class educational settings. Discriminant analysis was conducted to

determine how well the three key areas of school culture function to classify students in general education or special education placements. Multiple linear regression analysis was used to determine relationships, if any, between each of the three key areas of school culture (collaboration, collegiality and teacher efficacy) and FCAT Reading and Mathematics scores of these middle school students with specific learning disabilities.

CHAPTER 2

REVIEW OF THE LITERATURE

Introduction

This chapter was organized to permit a review of related literature on school culture and effective programming for students with specific learning disabilities. This study's emphasis on school culture specifically relates to the accountability movement in America's schools. The work of educational researchers, such as Bolman and Deal, Peterson and Senge outline the importance of school cultures that value and advocate change funneled towards standards-based reform initiatives.

This literature review is presented in five sections beginning with a description of organizational culture. The second section focuses on understanding school culture. The third section provides a discussion of leadership. The fourth section describes paramount elements of collaboration, collegiality and efficacy while the fifth section outlines implications for school leaders when shaping school culture.

Organizational Culture

Fullan and Hargreaves (1991) described four types of school cultures. First, on one extreme are ones of balkanization, where the teacher is the king or queen of his or her classroom resulting in a competitive atmosphere. These teachers focus on immediate, rather than long range issues and work in isolation implementing traditional practices.

Second, in cultures of comfortable collaboration, the prevailing culture selectively restricts collaboration. In these cultures, collaboration is thin and superficial. Teachers share materials and some instructional strategies, but avoid discussing deeper issues, such as curriculum, long-range planning or their philosophy of schooling. Third, in cultures of contrived collegiality, under a façade of formal, explicit bureaucratic policies and procedures, formal structures are unsupportive of collaborative cultures. Fourth, collaborative cultures emphasize continuous, career long learning where teachers show increased efficacy and confidence in their professional abilities. Collaborative cultures boast daily practices of team teaching, mentoring and shared decision-making. Teachers welcome opportunities for continued learning by attending in-service workshops, seminars and conferences where they seize every opportunity to network with other teachers, schools and programs.

Deal and Kennedy popularized Bower's definition of organizational culture as "the way we do things around here" (Deal & Kennedy, 1982). 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 terminology 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 efficiency.

Schools articulate their philosophy through vision and mission statements (Bolman & Deal, 1997).

Creating an organizational culture is a complex process. Key players include organizational heroes and heroines, rites, rituals and communication networks. Heroes and heroines immortalize the school's underlying values, provide role models, symbolize the school to outsiders and establish performance standards to motivate teachers and students to reach high performance outcomes. Everyday activities and celebrations that characterize the school may include teacher of the year, appointing a new principal, graduations, awards banquets or ceremonies. Stories or myths depicting heroes and heroines are communicated through a communications network. Each school has storytellers, often secretaries or custodians who interpret everyday happenings. Their interpretations of information and events mold the perceptions of others. Priests, organizational warriors, such as the school's Assistant Principal mold the school's culture through discourse and interaction with other school administrators, teachers, students and parents. Priests find the time to listen and offer alternative solutions to problems. Whisperers appear to have the principal's ear while gossipers communicate everyday school happenings through the communication network. Gossipers are integral in building and maintaining heroes and heroines, as they embellish and exaggerate past feats and latest accomplishments. Spies are the ears in the woodwork, since they know and communicate to others everything that goes on in the school (Bolman & Deal, 1997; Schein, 1985).

Understanding School Culture

“Understanding school culture is a vital part of school improvement” (Stoll & Fink, 1996, p.81). Observable only on the surface, school culture is an implicit concept. A person often learns of the school’s culture when he or she breaks an unspoken rule. Through astute observation and listening, a person can detect acceptable methods for adults to verbally and non-verbally communicate with one another and with students. Gruenert (2000) asserts that gradually, a school develops its unique personality. Expected patterns of behaviors 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, p. 14).

Gruenert (2000) described a collaborative school culture as a learning organization fostering ongoing student and teacher learning. Fostering a collaborative culture begins with identifying the components of a school culture. Artifacts provide concrete examples of the school’s culture, such as school and individual student’s trophies, published mission and vision statements and the manner administrators, teachers and support personnel greet strangers. Observations and formal interviews provide evidence of espoused organizational values while assumptions are expressed through values and mores.

Gruenert (2000) expressed the importance of school leaders first identifying the current school culture primarily through qualitative research practices, such as surveys and interviews. Administration of a school culture survey, along with observational data, provides a baseline of the school’s culture. Next, school leaders astutely create

organizational structures and opportunities for collaboration among school administrators, teachers, support staff, students and parents. Finally, school leaders who strive to develop a collaborative school culture reward those teachers who make positive collaborative efforts.

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. Stoll and Fink (1996) asserted that a school's new principal is the most statistically significant force in effecting change in that school's culture.

Stoll and Fink (1996) viewed school improvement as profoundly influenced by school effectiveness research. They view school cultures across a continuum between two dimensions: effectiveness – ineffectiveness and improving – declining. In *moving schools* (p. 115), members respond to their changing environment to allow the school to continue developing. Although teachers, administrators and the community consider *cruising schools* (p. 116) as effective, these schools are often located in high socio-economic communities where students show high achievement outcomes despite of the quality of the instruction. *Strolling schools* (p. 116) are often considered average schools. Their mission statements are often poorly articulated and show conflicting aims. These schools are in need of a catalyst, such as a new principal or a state or federal audit. Even though *struggling schools* (p. 116) are ineffective, their members are motivated to try to make a difference. These schools normally respond to external program evaluations because their

administrators and teachers acknowledge the need to change. Finally, *sinking schools* P. 116-117) are both ineffective and are unwilling to change. Their staff is often apathetic or ignorant and traditionally has poor parent involvement. These schools are normally located in the lowest socio-economic communities where school administrators and teachers blame parents for poor parenting skills.

Saphier and King (1985) posited that understanding school culture is inherent in cultural norms. Their research was based on how people relate to and value one another. Ten cultural norms summarized from the twelve cultural norms Saphier and King found to influence school improvement were:

1. Shared goals articulated through a shared vision focusing on teaching, learning and student interests.
2. Team responsibility for success articulated through high student achievement outcomes.
3. An atmosphere of collegiality observed through mutual collaboration focusing on the school as a holistic entity.
4. Continuous improvement as observed through continually implementing better practices, innovation and teaching-learning connections.
5. Shared commitment to lifelong learning as teachers continually improve their instructional techniques through engaging in cooperative group learning.
6. Willingness to take risks through experimentation and trial and error of new practices and strategies.

7. Shared commitment of administrators and teachers to make time for one another.
8. Mutual respect articulated through a group commitment to achieve shared goals in different ways.
9. An atmosphere of openness, caring and respect for one another.
10. Recognition of and celebrations of teacher and student successes.

Leadership

“Effective public schools in a democratic society are moral institutions charged with the responsibility to act in humane and principled ways in the interest of children and youth...A belief system relevant to learner centered schools is grounded in the principles of moral educational practices that attend persistently and purposefully to the growth and development of children and youth” (Astuto & Clark, 1995, p. 243).

Sergiovanni (1992) alluded to the inability of school administrators to employ leadership skills and processes to create schools responsive to societal demands for excellence, quality and effectiveness. Diana Lam, appointed Superintendent of Schools in Providence, Rhode Island in 2000, defined key school leadership qualities as the ability to build communities of learning through the capacity to understand adult and child learning processes. This leadership vision requires school leaders to function as educational and political visionaries, who collaborate with community leaders to provide students with the necessary support to become productive citizens (Burrello, Lasley & Beatty, 2001).

Sergiovanni (1992) described effective leaders as those who implement prescribed methods to produce maximal efficiency and effectiveness. Effective school leaders implement best practices for classroom management, curriculum and instruction, 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. Sergiovanni (1992) noted:

“The result is an emphasis on doing things right, at the expense of doing the right things. In schools, improvement plans become substitutes for improvement outcomes. Scores on teacher appraisal systems become substitutes for good teaching. Accumulation of credits in courses and inservice workshops becomes a substitute for changes in practice. Discipline plans become substitutes for student control. Leadership styles become substitutes for purpose and substance. Congeniality becomes a substitute for collegiality. Cooperation becomes a substitute for commitment. Compliance becomes a substitute for results” (p.4).

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 in congruence with the core educational philosophies, including the teaching-learning process, curriculum development, and accountability for results (Sergiovanni, 1996).

Sergiovanni (1992) presupposed “the heart of the school as moral community is its covenant of shared values” (p.108). Senge (1990) described a continuum of attitudes

towards the vision ranging from apathy, noncompliance, grudging compliance, and formal compliance to enrollment and finally commitment. Senge found commitment to team learning (inherent in collaboration and teamwork) requires employing mental models in practice that result in the shared vision. Sergiovanni (1992) described the virtuous school as having the following components:

1. Commitment to develop curiosity, inquiry and reflection to create self-learners and self-managers.
2. Independence to reach the ultimate potential in maximizing student learning; the development of a learning community
3. Enrollment in the philosophy that every student has the potential to learn, and
4. Commitment in a holistic philosophy that relationships are key to achieving academic success.

Paramount Elements of Collaboration, Collegiality and Efficacy

Collaboration

Collaborative school cultures are extremely powerful, and are accentuated when combined with moral purpose, creative ideas and positive outcomes (Cunningham, 2003).

Fullan (2001) eloquently expressed this concept.

Where the world is heading (or, more accurately, where it needs to head) makes businesses and schools less different than they have been in the past. Both need to be, and are, increasingly concerned with moral purpose and good ideas if they are to be successful and sustainable organizations... To be successful beyond the very short run, all organizations must incorporate moral purpose, understand complexity science; and respect, build, and draw on new human relationships...inside and outside the organization (p. 70).

Educators and business leaders have squandered valuable time and resources seeking solutions from external sources. Fullan (1998) provided educational leaders with the following advice:

Respect people you would like to silence. A problem with reform is people fail to learn from others' with opposing views. In turbulent times the key task of leadership is not to arrive at early consensus, but to create opportunities for learning from dissonance...Mobilizing people to tackle tough problems is the key skill needed these days (p. 8).

Fullan contends that, when forming new alliances, the leader should transcend in the direction of the danger. Healthy neighborhoods and healthy schools are congruent with one another. School-community relationships are the key to success. Manage emotionally and rationally. Leaders with high emotional intelligence create an environment of support among teachers, staff, parents and the community.

In the twenty-first century, schools, educational researchers and the government are focusing on ways to develop more collaborative cultures. Street and Hoover (2003) described a project in which regional educational laboratories transformed low-performing schools into strong learning communities. Professional development outcomes provide functional and real solutions, ones that were field tested in real situations focusing on specific circumstances, and made a positive impact on student learning.

Similarly, Corrie (1995) studied staff collaboration in six primary schools in Inner London and describes pseudo-collaboration in five of these schools in which, although the staff defines collaboration as participating in decision-making and policy formation, the head teacher formulates the schools' policies. Staff at these schools speaks in

generalities, rather than citing specific examples. One school boasts true collaboration where shared meaning is well established among all staff and the head teacher articulates a clear vision for the school. Corrie concluded, “The importance of staff collaboration has been recognized in England, Australia and North America, where government policies concerning education have been driven by models of market-based reform. These reforms are expressed in metaphors such as skills audits, delivery of content, effective management, ratcheting up standards, and equity and excellence” (p. 90).

O’Neil and Conzemius (2002) described a project in Madison, Wisconsin from 2000 through 2002 where they found school success is grounded in the school staff’s ability to learn, adopt, modify and innovate. Four keys to a successful school include a common focus, reflective practices, collaboration and partnerships and a continually increasing leadership capacity.

Statistically significant resources were allocated at three elementary schools for team planning and aligning the curriculum with state standards. Each school implements an approach for school improvement based on student need. One school focuses on mentoring, while a second on reducing pull out programs, and a third focuses on a common discourse revolving around Reading, writing and Mathematics literacy (O’Neil and Conzemius, 2002).

O’Neill and Conzemius (2002) described reflective practices at an elementary school. Sue Abplanalp, principal at Lowell Elementary School during the 2000-2001 school year asked her staff to evaluate the number of special education students who were excluded from state assessments. After reflecting on their mission statement and

schoolwide goals, the staff at this school decided to focus on specific skill sets special education students at the school were lacking and prepared these students to participate in Wisconsin state assessment testing.

Schools making the most statistically significant achievement gains, according to O'Neill and Conzemius (2002), were those boasting a collaborative environment. In these schools, administrators, teachers and parents embark on a common journey.

“Collaboration requires skill development over time, constant reinforcement and coaching, and structures that encourage and invite shared work around common goals” (p. 17). Finally, O'Neil and Conzemius contend that staff development is essential to building leadership capacity. They concluded, “leadership capacity grows when individuals focus on student learning, reflect on student assessments and learn as a collaborative team” (p. 17).

Lyman and Foyle (1998) posited that considering the premise that meaningful educational change takes root at the school level, teachers and administrators must collaboratively solve problems as members of schoolwide, grade-level and subject-area teams. Interactions within these teams, and between educators and parents and / or students statistically significantly impact the school's climate, student achievement, teacher effectiveness and morale. Strong, effective school leadership is contingent upon administrators and teachers making time to collaborate with one another and with students. Lyman and Foyle contended student and parent confidence is enhanced when they have opportunities to positively interact with administrators, teachers and school staff. Positive informal interactions take place when the professional shows empathy,

appreciation and respect. The teacher or administrator also uses positive discourse with the student and / or parent.

Pardini (2002) found well organized teacher induction programs are the basis of a positive school culture. Since teachers are encouraged to impart effective instructional and behavior management strategies, improved instruction prevails. Novice and veteran teachers feel valued and important. Effective instruction results in teachers believing they are an integral part of the school family.

Lyman and Foyle (1998) contended optimal staff development sessions take place in small, heterogeneous groups allowing group discussions and brainstorming activities. Teachers and administrators jointly plan and develop effective staff development workshops and in-services. Finally, staff development activities provide teachers with opportunities to network with other professionals from other school sites.

Corrie (1995) found the length of service at the given school has an effect on staff collaboration. This researcher furthermore premises the selection of new staff to fit within the established school culture is essential to maintain the school's climate and ethos. Corrie contends that the culture of open classroom doors can lead to the formation of shared meanings, which facilitates the thinking and development of a cohesive and reflective team.

Similarly, Williams, Prestage and Bedward (2001) found collaborative cultures are positively related to the quality of the organization's induction programs. Mandatory induction procedures have made a statistically significant impact on collaboration between veteran and new teachers. Williams et al explained the difference between

structural and spontaneous collaboration. Structural collaboration stems from organizational policies and procedures. These cultures statistically significantly improve the school's organizational mechanisms as teachers collaborate with one another through their day-to-day operations. Spontaneous collaboration is authentic in nature, as the entire staff is approachable and supportive of one another. Teachers bounce ideas off of one another when informally conversing with each other.

Collaborative Parent Involvement

Educational research supports schools developing strong parental involvement programs. James Comer, Yale University psychologist, presumes that the effectiveness of schools serving poor, disadvantaged and minority children is contingent upon strong parental involvement, especially in school governance and shared leadership (Davies, 1991). Deci and Chandler (1986) and Davies (1991) found that the most important thing is fostering collaborative teacher, parent and student partnerships. Collaborative teacher, specialist, and family relationships ensure student academic and social-emotional success.

Davies (1991) described Joyce Epstein's developmental model for school-family connections through five types of parental involvement:

1. Taking responsibility for children's safety, discipline, health, guidance and supervision;
2. Maintaining school-home connections;
3. Establishing parent volunteers in the classroom;

4. Implementing learning activities at home; and
5. Maintaining parents as partners in school governance, decision-making and advocacy.

Similarly, Davies (1991) credited advocates at major research centers including Zigler and Kagan at the Bush Center in Child Development and Social Policy at Yale University, Weiss at the Family Research Project at Harvard University and Cochran at Cornell University with establishing holistic parental involvement through child development, parent education and maintaining connections between parents and natural support systems. According to Davies, three common strands connect the parent-school partnership:

1. An overlying philosophy of success for all students;
2. A holistic emphasis linking emotional, physical and academic student growth; and
3. A shared responsibility between the home, school and community.

Research strongly supports the transformation of schools into learning communities and establishes the link between collaboration and school outcomes. Project REALIGN, a national teacher in-service project funded through the United States Department of Education from 1995 through 1998, provided strategies to develop schools into learning communities (Wald, & Casslebury, 1999). This model provides schools with a three-point plan that includes designing a future-oriented school improvement plan, reframing learning as a life-long venture, and providing teachers with vehicles to express their passionate devotion to teaching. Two concepts underlying this professional

development model include (a) schools as communities and (b) collaborative learning. Schools as communities provide a cornerstone for growth and positive change, as the school community unites around shared goals and a common vision. Collaborative learning requires the school district and teacher to share responsibility for the development, and implementation of the teacher's professional development plan.

During the past two decades, schools launched new staff development practices to promote teacher inquiry, action research, and professional collaboration. Sergiovanni (1996) cautioned school administrators of the need for school districts to encourage teacher inquiry. According to Sergiovanni, principals cannot expect teachers to facilitate inquiring classrooms when stifling district and school policies prevent teacher inquiry. Sergiovanni (1994) documented the importance of teachers and students developing strong interpersonal relationships including bonding and attachment to maximize student achievement. Students who feel loved and respected and believe they are an integral part of the school family show positive learning outcomes.

Senge (1990) distinguished between adaptive and generative learning. According to Senge, adaptive learning involves the rational decision-making process, while generative learning entails creative or out of the box applications. Teachers employing generative learning stimulate the student's higher-order cognitive processes, as they ask, "why is this a problem, as opposed to what should we do?" The second assumption identifies learning as an active, and slowly evolving process. Handy's 1995 study (as cited in Wald, & Casslebury, 1999) describes learning as occurring with the explanation of new ideas through employing the cyclical process of questioning, accepting ideas,

testing and reflecting. The third assumption embodies learning as intrinsic motivation incorporating meaningful experiences, and issues. Individuals engage in learning to satisfy their burning desire for knowledge, or to unleash their creative potential. Teachers' motivation rests upon meeting their esteem, autonomy, or self-actualization needs. The fourth assumption entails the experimental property of learning. Learning involves initiative, and taking calculated risks. The learner must overcome the fear of peers perceiving the learner as incompetent, and superiors inducing reparation or coercion. The fifth and final assumption identifies learning as ignited by prolific, diverse, and accessible information. The learner immerses him or herself into a vital learning environment, rich in abundant resources including colleagues, experts, literature and technology.

Blase and Blase (2001a) described a restructuring program in a Rhode Island school, in which teams of school administrators and teachers met to proactively brainstorm and solve problems. Teachers collaborated and generated solutions allocating resources, such as time and space. The school principal empowered teachers through establishing an atmosphere of support and collaboration.

Gruenert (2000) discussed the Middle Level Leadership Center's 1998 survey that was developed to assist school leaders to determine to which degree a particular school culture is collaborative. Six factors were found to contribute to the school's collaborative nature:

1. Collaborative Leadership measures the degree to which school leaders establish and maintain collaborative relationships with professional and support staff.

2. Teacher Collaboration measures the degree to which teachers pursue positive dialogue to foster the school's vision statement.
3. Professional development measures the degree to which teachers' value continuous personal professional development and schoolwide improvement initiatives.
4. Collegial support measures the degree to which teachers form effective collaborative teams.
5. Unity of Purpose measures the degree to which teachers create a common school mission.
6. Learning Partnership measures the degree to which teachers, parents and students collaboratively advocate for proactive student programs, services and opportunities.

Collaboration and Collegiality

Recent educational research links collaboration and collegiality with strong outcome measures. Peterson (2002b) asserted that schools with professional collaboration boast collegial relationships, discourse and body language supporting a strong work ethic and quality instruction and include:

1. Extensive sharing of professional knowledge and more elaborate problem-solving;
2. Robust professional networks to share information;
3. Higher degree of risk-taking and experimentation;

4. Prolific technical discourse to allow colleagues in the school to quickly exchange information;
5. Increased job satisfaction and school community; and
6. Increased continuous and comprehensive attempts for school improvement congruent with school level improvement initiatives.

Peterson (2002b) contended that these schools support practices fostering success, including:

1. Successes, mistakes and failures are openly shared, discussed and examined allowing support and technical assistance.
2. Open and flexible communication occurs, treating disagreements as opportunities for new dialogue.
3. Staffs are proud of their hard work and accomplishments; an atmosphere of collective responsibility prevails fostering an overall aura of organizational pride.
4. Colleagues openly voice disagreements as they discuss purpose and practice.

Busher and Blease (2000) examined cultures in science departments and conclude that, in healthy cultures, staff successfully copes with change, leaders employ transformational leadership through exercising power through and with others. They model and employ shared decision-making, moral values, mutual trust and a common vision.

The culture was based on trust between people, delegation of functions depending on people's abilities to carry them out, rather than only on status, values of

cooperation and shared purpose, particular styles of leadership which emphasized inclusivity of people; and a sense of belonging to the community” (p. 110-111).

Collaboration is about altering relationships with others (Christenson, Eldredge, Ibom, Johnson & Thomas, 1996). Senge (1990) described the difference between discussion and dialogue. He asserted that the purpose of discussion is for other group members to accept our views, a necessary component for collaboration. Participants in a dialogue gain collective insights far more reaching than any one of them could individually. Individual change must occur before organizational change is possible. Christenson et al provide a synopsis when they assert that risk taking and learning that takes place within dialogue and collaboration is addictive. At its best, the tension and difficulties are supported by the group’s collaboration. Ambiguities and opportunities for learning while on the emotional roller coaster force the group to become reflective. “While acknowledging the difficulties and ambiguities of both collaboration and dialogue, we use our own stories of change to argue for their viability to support reflection, change, and growth in teachers’ professional lives” (p. 195).

Howells (2000) reinforced the link between collaboration and forming collegial relationships. Howells asserts, “Collaboration is a process that requires continued intervention and revision, tenacity and dedication” (p. 161). Collaboration allows teachers, as a collective whole, to solve problems, improve situations and meet challenges any one of them could not solve alone. Collaboration allows teachers to teach by example.

Teacher Efficacy

Research supports the relationship between collaboration, collegiality and teacher efficacy / self-determination and academic achievement. Goddard (2002) defined collective efficacy of schools as related to faculty impressions that the faculty as a whole is responsible for positive student outcomes. Ross (1995) defined teacher efficacy as the extent to which teachers believe their efforts positively affect their students' academic achievement. Ross found teacher efficacy contributes to student achievement, mainly through goal setting. He established a positive correlation between teacher efficacy and their students' achievement in both the cognitive and affective domains. A positive relationship was reported between teacher efficacy and their students' self-esteem, motivation, self-direction and attitudes about school.

Ross (1995) found teacher efficacy is enhanced when teachers reflect upon their beliefs and practices. According to Ross, teachers who reflect upon their impact on student learning show a propensity to take responsibility for student learning outcomes. Ross asserts that these teachers accept responsibility for lack of student learning rather than blame this outcome on environmental factors, a lack of parental involvement or risk factors, such as limited English proficiency. Ross contended that teachers with high efficacy tend to subscribe to the tenet that ability is an acquired, rather than an innate trait. Furthermore, Ross also found that teachers who define classroom success in terms of their students' social development are inclined toward high efficacy even when district, state or federal achievement standards are inappropriate for at risk students.

In this 1995 study, Ross found a positive relationship between teacher efficacy and working conditions. Teachers with high efficacy interact more frequently with peer coaches, participate in joint work (team teaching, peer coaching, mentoring or committee work) and assumed a stronger role in school decision making than teachers with lower efficacy. Ross found that career ladders have a negative impact on efficacy when teachers are not allowed to participate in establishing evaluation standards or when poor teachers receive job promotions. Teacher efficacy continues to decline when teachers believe portfolio assessments used in performance evaluations are not related to the actual work they do in their classrooms.

Allinder (1995) studied the relationship between teacher efficacy and academic achievement with students with mild disabilities. In this study, nineteen special education teachers with roughly ten years teaching experience implemented curriculum based measurement for Mathematics computational skills. Allinder found teachers with high teaching efficacy set more audacious goals than their counterparts with lower teaching efficacy. Furthermore, Allinder found that teachers with higher personal and teaching efficacy produce higher Mathematics computational skills in their students' at year's end. Allinder found teachers with high efficacy persevere with those students who were performing poorly.

Smylie (1988) and Rosenholz (1989) found a positive relationship between teacher efficacy and their conviction that student learning outcomes are strengthened by effective instruction. These teachers were more confident of their classroom performance, as their classroom environment maintained a stronger, academic focus than other teachers

with lower efficacy. Similarly Ross (1995) found teachers with high efficacy are more likely to try new instructional strategies, thus increasing their repertoire of effective classroom techniques. These findings are in concert with Goddard's (2002) assertion that faculties with collective efficacy believe their efforts as a whole have a positive effect on the students.

Cunningham (2003) studied the effect of school culture on the academic achievement of fourth grade Reading achievement scores. A statistically significant relationship was found between overall culture and academic achievement, between collegiality and achievement and between efficacy and achievement. However, no statistically significant relationship between collaboration and achievement was found. Cunningham also found a proportionate positive relationship between school culture and academic achievement of this population of elementary school children.

Implications for School Leaders

Peterson and Deal (1998) asserted that school leaders are instrumental in shaping a school's culture. School leaders:

1. Communicate core values as they verbally and non-verbally interact with school administrators, teachers, support staff, parents, and students;
2. Support, implement and reinforce rituals and traditions to support the school climate;
3. Recognize, honor and revere heroes and heroines for their accomplishments;
4. Speak eloquently of the underlying school mission;

5. Celebrate student, staff and community accomplishments; and
6. Reinforce the focus on students through remembering student success and academic achievement stories.

Peterson and Deal (1998) identified five aspects of positive school cultures:

1. Shared sense of purpose among all staff;
2. Underlying norms of collegiality, improvement and dedication;
3. Rituals and school traditions celebrate positive student outcomes, teacher innovation and strong parental involvement;
4. Storytellers, heroes and heroines provide information, support and rich history; and
5. Atmosphere of success, joy and humor prevail.

Astute school leaders realize the power generated by painting a concrete image through storytelling. Kaye and Jacobson (1999) contended that stories enhance a person's understanding and establish revered shared meaning. Mentors and coaches communicate shared meaning as teachers and staffs learn of the organization's heritage. Stories about past organizational events depict vivid and memorable images. According to Kaye and Jacobson, storytelling helps teachers develop leadership skills as they convey ways particular problems were approached and solved in the past.

Peterson (2002a) described positive staff development programs in positive school cultures as those where teachers value professional development and articulate this in the way we do things around here. Professional development is nurtured when the school's history and stories reflect examples of functional professional learning and a group

commitment to learning. Positive school cultures value staff that take responsibility for their own learning, organize study groups and take the lead in developing school improvement plans. Conversely, according to Peterson, negative school cultures significantly impede staff development. An atmosphere perseverating on pessimistic stories, negative norms and mores impoverish the culture. Staff attack and patronize positive stories. Teachers believe staff development activities are boring and unproductive.

Peterson (2002a) postulated that school leaders shape their school's culture in a three-step process. First, the leader reads the culture by learning about the school's history, Reading previous school improvement plans to detect signs of what is really important, using staff meetings as a platform to discuss meaningful and profitable workshops. By asking their staff to compare the school culture to an animal, he / she can detect themes and patterns. Second, the leader assesses the culture by asking two questions:

1. What aspects of the culture are positive and should be reinforced?
2. What aspects of the culture are negative or harmful and need to be changed?

Third, the leader shapes the culture in the following ways:

1. Celebrates successes at staff meetings, parties and ceremonies;
2. Seizes every opportunity to tell stories of accomplishment and collaboration;
3. Capitalizes on language from workshops to facilitate a commitment to staff and student learning;
4. Continually reinforces norms and values through discourse and body language;

5. Establishes rituals and traditions to make culture an opportunity for culture building and group learning;
6. Allocates funding to implement new ideas; and
7. Establish opportunities for informal staff learning and collaboration.

Peterson (2002a) contended shaping culture is at the forefront of school reform because of the national emphasis on higher curriculum standards, assessment and accountability. School leaders shape a positive and supportive school culture by supporting values that align the curriculum, instruction and assessment. It is the responsibility of everyone at the school to develop and sustain a culture that nurtures student and teacher learning.

Hargreaves and Fullan (2000) identified four global historical phases in the development of teacher professionalism. School leaders who are cognizant of where their teaching staff fit in this development of teacher professionalism are more likely to enhance positive school cultures in their schools. The first phase (1700s to 1960s), the pre-professional age, contains lecturing, note taking, question and answer and independent seatwork. During this time, teachers learn through apprenticeship and trial-and-error methods. The second phase (1960s to mid-1980s), the autonomous professional age, contains the values of individualism. Most teachers teach self-contained classes and show little collaboration and teamwork with other teachers. Although induction and mentoring programs are provided during this time, the clear message is that these programs are intended only for the novice or incompetent teacher. Therefore, this age of

the autonomous professional provide teachers with little preparation for coping with the demands imposed by educational reform.

During the third phase (mid-1980s to the end of the twentieth century), the age of the collegiate professional, demands for collaborative cultures are dictated by technological advances, statistically significant widening of curricular demands and including special education students in general education classes. In response to these demands, teachers developed a common vision, adapted to impetuous change and established a robust sense of teacher efficacy. The twenty-first century marked the beginning of the fourth, or professional age where educators must respond to social, economic, political and cultural changes. “The content of professional learning needs to become wider and deeper. It needs to encompass working with parents, becoming assessment literate, keeping up with scientific breakthroughs in the pedagogy of learning, rekindling the purpose and passion of teaching and working with others to bring about positive reforms in education” (Hargreaves & Fullan, 2000, p. 52).

Blase and Blase (2001b) asserted that effective leaders carefully employ the transformational leadership style. These educational researchers contend collaboration begets collegiality. According to Blase and Blase (2002b), when school leaders implement transformational leadership principles, teachers are encouraged to employ innovation and problem solving. Teaching teams “integrate collaboration, peer coaching, inquiry, collegial study groups and reflective discussion to promote professional dialogue” (p. 22). These leaders commit themselves to promote school improvement,

reform and to develop a learning community. Blasé and Blasé documented that instructional leadership is embedded in this school culture.

Blase and Blase (2001b) contended that true empowerment requires the recognition of teachers as knowledgeable professionals as the principal supports staff development, involves teachers in the decision-making process and takes the time to develop relationships with teachers. “Using facilitative power, educational leaders create favorable conditions for teachers to enhance their personal and collective performance” (p. 13). Blase and Blase (2001b) described how trust and shared leadership enhances this professional climate. “Principles enhanced trust in teachers by working to create school climates free of intimidation, fear, coercion and criticism... Successful shared governance principals sense that the school’s success lies in the skills and attitudes of the professional staff, not merely in the leadership capabilities of the principal” (p. 33).

Summary

This purpose of this chapter was to outline literature and research on school culture to serve as a conceptual framework for this study. The work of notable educational researchers, such as Bolman, Deal, Peterson, Senge, and Sergiovanni established the cultural and school leadership framework. This literature review was presented in five sections. Sections one and two focused on a description of and discussion of school culture. Section three focused on leadership. Section four discussed paramount elements of collaboration, collegiality and efficacy. This literature review culminated with implications for school leaders.

CHAPTER 3

METHODOLOGY

Introduction

The purpose of this chapter is to present the methodology and statistical procedures used to determine the overall cultures of selected Florida middle schools in Osceola County and how these cultures related to the achievement and placement of students with specific learning disabilities in each of these schools. Survey data were collected and analyzed to determine the teachers' perceptions of their school's culture. Collection and analysis of seventh and eighth grade student's 2003-2004 FCAT NRT Reading and Mathematics percentile rank scores identified current student achievement at each of the four schools studied. Additionally, FCAT NRT Reading and Mathematics percentile rank scores were collected and analyzed from 2000-2001, 2001-2002, 2002-2003 and 2003-2004 school years to provide a longitudinal comparison from each student's elementary to middle school transition through their middle school years.

The study was commenced during the 2004 Spring Semester at the University of Central Florida. Preliminary comparison and analysis of the data were completed during the 2004 Summer Semester while the final analysis of data, conclusions and recommendations were presented during the 2004 Fall Semester.

This chapter is partitioned into six sections. The first section presents a statement of the problem while the second describes the study's population. The third and fourth sections, respectively, profile the data collection procedures and instrumentation. The

fifth section recounts the research questions while the final section narrates the data analysis. Chapter 3 concludes with a summary of these six sections.

Problem Statement

This study was developed to provide data concerning the overall cultures of selected Florida middle schools. The problem of this study was: (1) to determine how well the three areas of school culture (collaboration, collegiality and teacher efficacy) predict the placement of students with specific learning disabilities in general education or special education (resource and separate class) educational settings; and (b) to determine the degree of interaction (if any) between each of the same three areas of school culture and the academic achievement of students with specific learning disabilities. Since the interaction of school culture and outcomes for students with disabilities is in its infancy, the results of this study contributed to the existing research on school culture in this era of accountability and enhanced curriculum reform. These results may be valuable to researchers attempting to establish a link between school culture and standards-based school restructuring and academic achievement of students with disabilities. The results may be used to assist school principals and district-level special education program specialists in planning and implementing staff development programs to maximize the learning potentials of these students.

Population

The population of this study was comprised of students with specific learning disabilities at four middle schools in Osceola County Public Schools, Kissimmee, Florida during the 2003 – 2004 school year.

Data Collection

The Resource Compliance Specialist (RCS) at the four selected middle schools received a letter describing the scope and importance of the study and requesting his / her participation on April 23, 2004 (See Appendix A). Only one RCS agreed to participate in the study. This RCS personally received a set of 30 survey instruments (see Appendix B), a prenotice letter (see Appendix C) and a cover letter (see Appendix D) describing the scope and importance of the study and requesting their participation on May 3, 2004. Other survey participants were mailed the prenotice letter on May 3, 2004 through interoffice mail; and the survey instrument and cover letter on May 5, 2004. The letters requested each teacher complete and return the survey in the enclosed envelope through the school system courier service.

The first and second contacts yielded 18 returns from School A, 16 returns from School B, 19 returns from School C and 16 returns from School D – providing an overall response rate of 57.5%. A thank you / reminder letter (see Appendix E) was mailed to all respondents through interoffice mail on May 17, 2004. This third contact yielded two additional returns at School A, 4 at School B, 4 at School C and 4 at school D – providing an overall response rate of 70.83%. A follow-up survey with a new cover letter was

mailed to all non-responders through interoffice mail on May 20, 2004 (see Appendix E). This fourth contact yielded 7 additional returned surveys from School A, 8 from School B, 2 from School C and 8 from School D – providing a response rate of 91.66%. All non-responders were contacted through e-mail (see Appendix F) or by telephone on May 24, 2004. This fifth and final contact yielded two additional responses from School A and two from School C. No additional responses were received from Schools B or D. Surveys were deemed usable when the respondent answered all eighteen-survey questions. Overall, three surveys were deemed unusable – two from School A and one from School D. The final usable response rate from the five contacts yielded 27 usable surveys from School A (90% response rate); 28 from School B (93.33% response rate); 27 from School C (90% response rate); and 27 from School D (90% response rate). Of the surveys that were returned, 109 were considered to be usable, yielding an overall response rate of 90.8325%.

Instrumentation

The survey instrument, School Culture Survey was used to collect data. This instrument was modified from Self-Assessment: School Culture Triage by Masden-Copas (2002). This original instrument was designated to assess the current condition of a school's culture. The survey instrument used 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 added two additional demographic items designed to

fit the design and scope of this study. Permission to use human subjects was granted (see Appendix I).

The survey instrument used in this study was comprised of three sections, each containing five to seven questions plus demographic information. The three sections include: (a) collaboration (questions 1-5); (b) collegiality (questions 6-12); and (c) efficacy (questions 13-18). Responders were asked to rate each question using a five point Likert-type scale (1: Never; 2: Rarely; 3: Sometimes; 4: Often; and 5: Always). Respondents also provided data concerning personal and professional information consisting of: (a) years at current school; (b) total years of teaching experience; (c) whether current teaching assignment is in their area of certification; (d) area of certification; (e) race; (f) gender; and (g) current grade level(s).

Research Questions

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

1. How well do the three key areas of school culture (collaboration, collegiality and teacher efficacy) predict the placement of middle school students with specific learning disabilities in general class or special education (resource and separate class) educational settings?
2. What relationships (if any) exist between each of the three key areas of school culture (collaboration, collegiality and teacher efficacy) and FCAT Reading and

Mathematics scores of middle school students with specific learning disabilities?

Data Analysis

The researcher completed all statistical computations using the statistical software SPSS Graduate Pack 12.0 for Windows. Analyses of the data were reported using descriptive statistics, percentile rank, mean scores and standard deviation for each of the variables.

All surveys were collected and separated by school using an alpha numerical code printed on each survey. The alpha numerical code identified the school and respondent for follow up during the data collection phase of this study. When follow up was completed, the respondent's name was deleted from the Excel 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-type scale (1: Never; 1: Rarely; 3: Sometimes; 4: Often; and 5: Always). Each respondent's scores for collaboration; collegiality; and efficacy were totaled and divided by the number of items in each of these key areas of school culture (collaboration: 5; collegiality: 7; and efficacy: 6) to identify that respondent's mean score for that key area.

Wagner and Masden-Copias (2002) described overall school cultures falling in the (a) first quartile as in need of critical and immediate attention; (b) second quartile as in need of modifications and improvement; (c) third quartile as a strong culture, but cautioned school leaders to continue to monitor and make positive improvements; and (d)

fourth quartile as amazing, but to continue to monitor. Therefore, school culture scores in the three key areas (collaboration, collegiality and teacher efficacy) were analyzed and compared within these parameters.

Data for the 2001-2002, 2002-2003; and 2003-2004 FCAT NRT Reading comprehension and Mathematics problem solving scores for students with specific learning disabilities were obtained from the Just Five Clicks database maintained at Osceola County Public School Intranet. FCAT percentile rank scores in Reading and Mathematics from 2001, 2002, 2003 and 2004 were used in the analysis of data.

Data Analysis for Research Question 1

Research Question 1 focused on the degree of interaction, if any, that was observed between the perceived level of school culture and placement of middle school students with specific learning disabilities in general education and special education (resource and separate class) educational settings. In order to answer Research Question 1, mean FCAT Percentile Rank scores in Reading Comprehension and in Mathematics Problem Solving were calculated for each school, and aggregated by placement. Likewise, mean scores on the School Culture Survey for teacher perceptions of collaboration, collegiality and efficacy / self-determination was calculated for each school. Classification discriminant analysis was used to detect how well the three key areas of school culture classified the placement of middle school students with specific learning disabilities in general education or special education (resource or separate class) educational settings.

Data Analysis for Research Question 2

Research Question 2 focused on the degree of interaction, if any, between the academic achievement of middle school students with specific learning disabilities and the perceived level of school culture, as reported by a random sample of teachers. In order to answer Research Question 2, mean percentile rank scores on the 2004 FCAT NRT Reading Comprehension and Mathematics Problem Solving were recorded for students with specific learning disabilities from each school. In the same manner, mean scores on the School Culture Survey in (a) collaboration; (c) collegiality; and (d) teacher efficacy / self-determination was calculated. A regression analysis was calculated to determine any interaction between the perceived levels of school culture and mean FCAT NRT percentile rank scores in Reading comprehension and Mathematics problem solving for students with specific learning disabilities.

Summary

This chapter outlined the methodology and procedures used to determine the overall cultures of four selected Central Florida middle schools and how these cultures related to (1) placement of and (2) academic achievement of students with specific learning disabilities. The chapter began with a description of the population and problem statement. Next, this chapter discussed the development of the survey instrument and the statistical procedures used in the analysis of data.

Data analysis was based on an overall survey return rate of 90.8325% from the four schools; yielding a total of 109 returned usable surveys. Conclusions from the results

of the generated data were used to answer the two 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 these data.

CHAPTER 4
ANALYSIS OF THE DATA

Introduction

This study was designed to gather data regarding the relationship of middle school cultures to the academic achievement of and placement of middle school students with specific learning disabilities. It was intended to enhance the existing literature on collaboration, collegiality and self-efficacy, as related to the achievement of and placement of students with specific learning disabilities. This study focused on two research questions, which were:

1. How well do the three key areas of school culture (collaboration, collegiality and teacher efficacy) predict the placement of middle school students with specific learning disabilities in general class or special education (resource and separate class) educational settings?
2. What relationships (if any) exist between the three key areas of school culture (collaboration, collegiality and teacher efficacy) and FCAT Reading and Mathematics scores of middle school students with specific learning disabilities?

Chapter 4 consists of five sections. The first and second sections, respectively, present the two research questions. Section three describes and analyzes the demographic characteristics of the survey population. The fourth section describes the relationships

between the three key areas of school culture at the four middle schools in Osceola County, Florida. The fifth section describes and analyzes FCAT Reading and Mathematics FCAT percentile rank scores of students with specific learning disabilities in grades seven and eight during the 2003-2004 school year. FCAT scores for this analysis were extracted over a four-year period and encompassed the 2000-2001, 2001-2002, 2002-2003 and 2003-2004 school years. The analysis of these FCAT scores included a comparison of students in general education, resource class and separate class placements. The data were generated by: (1) responses by middle school general education and exceptional student education teachers at the four middle schools to the self-administered survey instrument; and (2) FCAT Reading, Mathematics and percentile rank scores for seventh and eighth grade students with specific learning disabilities over the past four years in general class and special education placements.

Research Question 1

How well do the perceived levels of three key areas of school culture (collaboration, collegiality and teacher efficacy), as measured by the School Culture Survey predict the placement of middle school students with specific learning disabilities in general class and special education (resource or separate class) educational settings?

Research Question 1 focused on determining how well the three key areas of school culture (collaboration, collegiality and teacher efficacy), as measured by the School Culture Survey, function to classify middle school students with specific learning disabilities in regular education or special education (resource or separate class) placements. Because it is assumed that the three key areas of school culture correlate,

discriminant analysis was used to observe how well the weighted aggregate of school culture classifies the educational placement of middle school students with specific learning disabilities. With two classifications (g) into which placements these exceptional students may fall, the discriminant analysis procedure will estimate one classification function for evaluation (g-1 functions).

Classification Discriminant Analysis was deemed a suitable procedure because covariance matrices across groups were not different to a statistically significant degree. The results of the analysis are presented in Table 1.

Table 1

Box's Test Of Equality Of Covariance Matrices

Box's M		10.284
F	Approx.	1.661
	df1	6
	df2	71376.267
	Sig.	.126

Tests null hypothesis of equal population covariance matrices.

A review of the squared canonical correlations suggest the function contributes little to successful classification, explaining only 1.3% $(.114)^2$ of the variation in group membership (see Table 2).

Table 2

Summaries of Canonical Discriminant Functions

Eigenvalues				
Function	Eigenvalue	% of Variance	Cumulative %	Canonical Correlation
1	.013(a)	100.0	100.0	.114
Wilks Lambda				
Test of Function(s)	Wilks Lambda	Chi-square	df	Sig.
1	.987	1.373	3	.712

Since this result is not statistically significant, it will not be discussed further (Wilks γ .987 χ^2 (3) = 1.373, p = .712).

Research Question 2

What relationships (if any) exist between the perceived levels of each of the three key areas of school culture (collaboration, collegiality and teacher efficacy), as measured by the School Culture Survey and FCAT Reading and Mathematics scores of middle school students with specific learning disabilities?

A bivariate regression analysis was calculated to determine any relationships that exist between the three areas of school culture (collaboration, collegiality and teacher efficacy) with current FCAT Reading and Mathematics percentile rank scores for middle school students with specific learning disabilities. This regression analysis revealed no statistically significant relationships between the three key areas of school culture and current FCAT Reading and Mathematics percentile rank scores for middle school students with specific learning disabilities.

Overall, the linear composite of the independent variables entered into the regression procedure predicted the following six relationships:

1. 0.4% of the variation between 2004 FCAT Reading percentile rank scores of middle school students with specific learning disabilities and teacher perceptions of the level of collaboration in their school [$F(1, 107) = .452, p = .503$];
2. 0.6% of the variation between 2005 FCAT Reading percentile rank scores of middle school students with specific learning disabilities and teacher perceptions of the level of collegiality in their school [$F(1, 107) = .691, p = .408$];
3. 0.1% of the variation between 2004 FCAT Reading percentile rank scores of middle school students with specific learning disabilities and teacher perceptions of the level of teacher efficacy in their school [$F(1, 107) = .067, p = .796$];
4. 0.4% of the variation between 2004 FCAT Mathematics percentile rank scores of middle school students with specific learning disabilities and teacher perceptions of the level of collaboration in their school [$F(1, 107) = .410, p = .523$];
5. 0.1% of the variation between 2004 FCAT Mathematics percentile rank scores of middle school students with specific learning disabilities and teacher perceptions of the level of collegiality in their school [$F(1, 107) = .096, p = .758$]; and

6. 1% of the variation between 2004 FCAT Mathematics percentile rank scores of middle school students with specific learning disabilities and teacher perceptions of the level of teacher efficacy in their school [$F(1, 107) = 1.061, p = .305$].

All of the confidence intervals around each of the b weights included zero as a probable value. This suggests that the results for each of the independent variables (teacher perceptions of the level of collaboration, collegiality and teacher efficacy in their school) probably do not predict or explain the dependent variable (2004 FCAT Reading and Mathematics percentile rank scores of middle school students with specific learning disabilities).

Secondary Analyses

Survey Population and Demographic Characteristics

The survey population for this quantitative study was comprised of a random sampling of thirty teachers (twenty-five general education and five exceptional student education teachers) at each of four middle schools in Osceola County, Florida during the 2003 – 2004 school year. Data were generated from teacher responses to a self-administered survey measuring teacher perceptions of their school's culture, as indicated by three key areas of school culture: collaboration, collegiality and self-efficacy. A total of 109 individual surveys were returned from the four participating middle schools. Table 3 and corresponding Figure 1 present the percentage of responding teachers at these schools. Tables 4 through 8 and corresponding Figures 2 through 6 outline demographic

information obtained through a descriptive analysis of mean percentages of five demographic items on the survey instrument.

Table 3

Percentages Of Responding Teachers From Each School

School A (N = 27)	School B (N = 28)	School C (N = 27)	School D (N = 27)	Total Sample (N = 109)
Gen Ed: 23 ESE: 4	Gen Ed: 24 ESE: 4	Gen Ed: 22 ESE: 5	Gen Ed: 23 ESE: 4	Gen Ed: 92 ESE: 17
90%	93.33%	90%	90%	90.83%

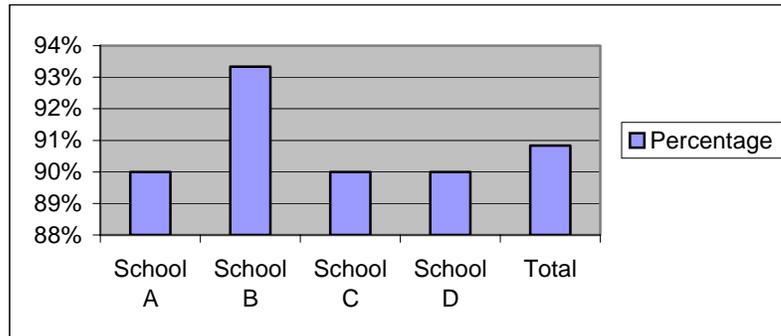


Figure 1: Percentage Of Responding Teachers At Each School

Table 4 and corresponding Figure 2 present the average years teachers at the four middle schools have taught at their current school. The four categories depicting this

experience were: 1-2 years, 3-9 years, 10-14 years and 15 or more years of teaching experience at the teachers' current schools. Thirty-eight percent of the faculty in the representative sample of teachers from School A, 50% from School B, 41% from School C, and 28% from School D had 1-2 years of teaching experience at their present schools. Forty-one percent of the teachers in this representative sample from School A, 29% from School B, 48% from School C and 36% from School D have taught between 3 and 9 years at their current school. Seven percent of the teachers from School A, 14% from School B, 7% from School C and 18% from School D have taught between ten and fourteen years at their current school. Fourteen percent of the teachers from School A, 7% from School B, 4% from School C and 18% from School D have taught for fifteen or more years at their current school. Overall, 39.15% of teachers in this representative sample have taught in their present school for 1-2 years; 39.5% between 3 and 9 years; 11.5% between ten and fourteen years; and 11.75% for fifteen or more years.

Table 4

Mean Percentages – Years Of Teaching Experience At Present School

Years	School A (N = 27)	School B (N = 28)	School C (N = 27)	School D (N = 27)	Total Sample (N = 109)
1-2	38% 7 Gen Ed 3 ESE	50% 14 Gen Ed 0 ESE	41% 7 Gen Ed 4 ESE	28% 7 Gen Ed	39.25% 35 Gen Ed 7 ESE
3-9	41% 10 Gen Ed 1 ESE	29% 6 Gen Ed 2 ESE	48% 12 Gen Ed 1 ESE	36% 8 Gen Ed 2 ESE	39.50% 36 Gen Ed 6 ESE
10-14	79% 2 Gen Ed	14% 2 Gen Ed 2 ESE	7% 2 Gen Ed	18% 3 Gen Ed 2 ESE	11.50% 9 Gen Ed 4 ESE
15+	14% 4 Gen Ed	7% 2 Gen Ed	4% 1 Gen Ed	18% 5 Gen Ed	11.75% 12 Gen Ed

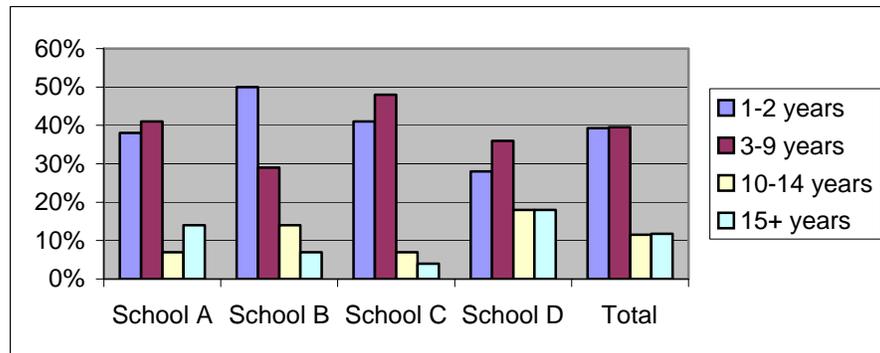


Figure 2: Mean Percentages – Years Teaching Experience At Current School

Table 5 and corresponding Figure 3 present the combined years of teaching experience for teachers at the four middle schools. The four categories depicting this experience were: 1-2 years, 3-9 years, 10-14 years; and 15 or more years of total teaching experience. Twenty-one percent of the teachers from School A, 25% from School B, 26% from School C and 18% from school D have 1-2 years of combined teaching experience. Thirty-one percent of the teachers from School A, 25% from School B, 44% from School C and 18% from school D have between 3 and 9 combined years of teaching experience. Seventeen percent of the teachers from School A, 21% from School B, 15% from School C and 21% from School D have between 10 and 14 combined years of teaching experience while 31% of the teachers from School A, 29% from School B, 15% from School C and 21% from School D have fifteen or more years teaching experience. Overall, 22.5% of the teachers in the sample population have taught for 1-2 years, 29.5% for 3 to 9 years, 24% for 10 to 14 years and 24% for fifteen or more years. Table 2

Table 5

Mean Percentages –Years Of Combined Teaching Experience

Years	School A (N = 27)	School B N = 28)	School C (N = 27)	School D (N = 27)	Total Sample (N = 109)
1-2	21% 4 Gen Ed 2 ESE	25% 7 Gen Ed	26% 6 Gen Ed 1 ESE	18% 5 Gen Ed	22.50% 22 Gen Ed 3 ESE
3-9	31% 6 Gen Ed 2 ESE	25% 7 Gen Ed	44% 9 Gen Ed 3 ESE	18% 5 Gen Ed	29.50% 27 Gen Ed 5 ESE
10-14	17% 5 Gen Ed	21% 3 Gen Ed 3 ESE	15% 4 Gen Ed	43% 10 Gen Ed 2 ESE	24.00% 22 Gen Ed 5 ESE
15+	31% 8 Gen Ed	29% 7 Gen Ed 1 ESE	15% 3 Gen Ed 1 ESE	21% 3 Gen Ed 2 ESE	24.00% 21 Gen Ed 4 ESE

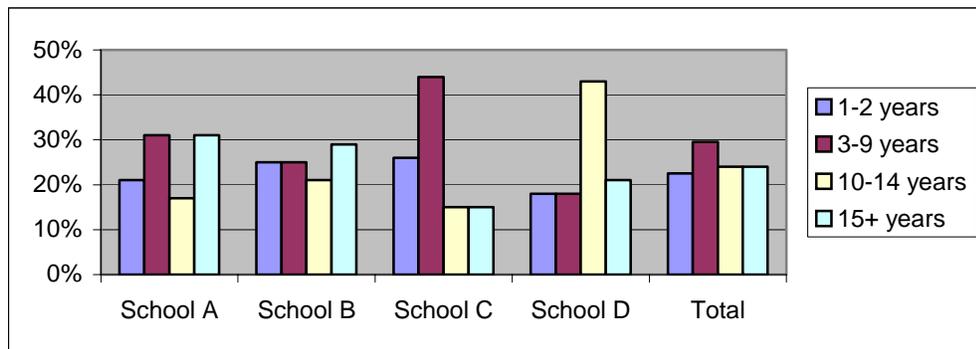


Figure 3: Mean Percentages – Years Combined Teaching Experience

Table 6 and corresponding Figure 4 present the percentage of responding teachers who were currently certified in the subjects for which they currently taught. Eighty- three percent of the teachers at School A, 86% at School B, 78% at School C and 96% at school D were currently certified in the subject areas for which they currently taught, while 17% of the teachers at School A, 14% at School B, 22% at School C and 4% at school D were not currently certified in the subject areas for which they currently taught.

Table 6

Mean Percentages – Teachers Certified In Subject Areas Currently Teaching

Certified	School A (N = 27)	School B (N = 28)	School C (N = 27)	School D (N = 27)	Total Sample (N = 109)
Yes	83%	86%	78%	96%	85.75%
No	17%	14%	22%	4%	14.25%

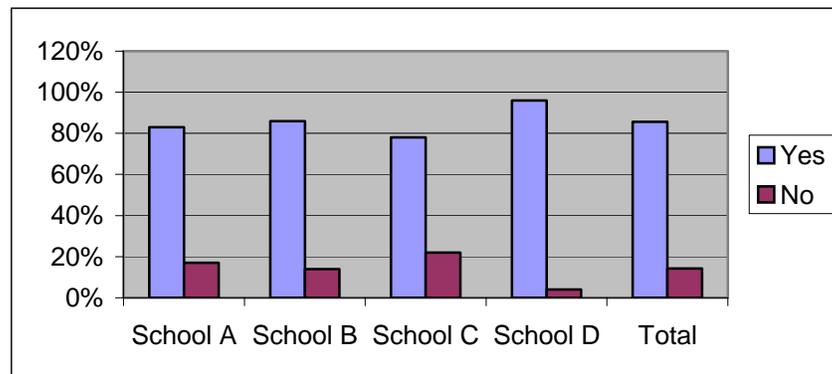


Figure 4: Mean Percentages – Certified Teachers In Subject Areas Currently Teaching

Table 7 and corresponding Figure 5 present the percentage of responding teachers who were certified in general education or exceptional student education (ESE). Fifty-two percent of the teachers from school A, 57% from School B, 41% from School C and 71% from School D were currently certified in general education. Of the remaining teachers in the representative sample, 48% of the teachers from School A were currently certified in ESE (10% in Varying Exceptionalities (VE), 34% in SLD and 4% in other areas of exceptional education). Forty-three percent of the remaining teachers from School B were certified in ESE (7% in VE, 11% in SLD and 25% in other areas of exceptional education). Fifty-nine percent of the remaining teachers from School C were certified in ESE (11% in VE, 44% in SLD and 4% in other areas of exceptional education). Twenty-nine percent of the remaining teachers from School D were certified in ESE (7% in VE, 11% in SLD and the remaining 11% in other areas of exceptional education). The sample population yielded 55.25% of their teachers certified in general education, 8.75% in VE, 25% in SLD and 11% in other areas of exceptional education.

Table 7

Mean Percentages – Teacher Areas Of Certification

Certification	School A (N = 27)	School B (N = 28)	School C (N = 27)	School D (N = 27)	Total Sample (N = 109)
General Ed	52%	57%	41%	71%	55.25%
VE	10%	7%	11%	7%	8.75%
SLD	34%	11%	44%	11%	25.00%
Other ESE	4%	25%	4%	11%	11%

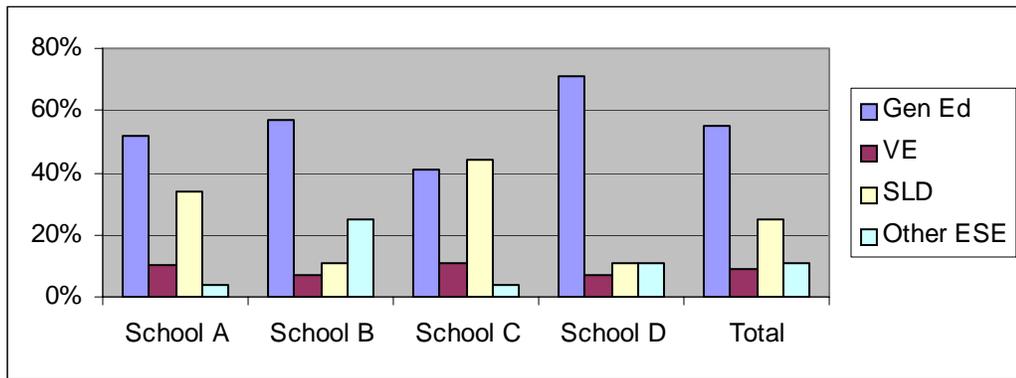


Figure 5: Mean Percentages – Teacher Area Of Certification

Table 8 and corresponding Figure 6 display the racial diversity of the responding teachers in the sample population. Overall 10.75% were Afro-American, 38.5% Hispanic, 49.25% Caucasian, and 1.5% Asian. Of this composite, 14% of the teachers from School A, 7% from School B, 15% from School C and 7% from School D were African-

American. In comparison, 17% of the teachers from School A, 86% from School B, 26% from School C and 25% from School D were Hispanic. Sixty-six percent of the teacher from School A, 7% from School B, 56% from School C and 68% from School D were Caucasian. Rounding out the sample, Asians comprised 3% of the sample from Schools A and C.

Table 8
Mean Percentages – Teacher Racial Diversity

Race	School A (N = 27)	School B (N = 28)	School C (N = 27)	School D (N = 27)	Total Sample (N = 109)
African American	14%	7%	15%	7%	10.75%
Hispanic	17%	86%	26%	25%	10.75%
Caucasian	66%	7%	56%	68%	49.25%
Asian	3%		3%		1.50%

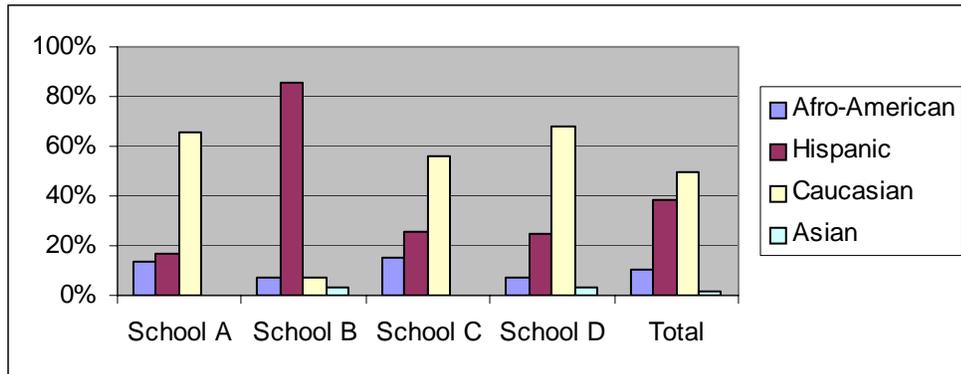


Figure 6: Mean Percentages – Teacher Racial Diversity

Analysis and Comparison of Three Key Areas of School Culture

Overall, teacher responses from the four middle schools fell in the third quartile, on the surface indicating an overall strong culture in those schools. These results indicate that school leaders should continue to monitor the school culture and continue to make positive improvements. However, closer analysis revealed School A fell in the middle second quartile, indicating that school leaders should make modifications and improvements. Schools C and D fell in the lower third quartile in collaboration. All four schools fell in the lower third quartile in collegiality and Schools A, C and D fell in the lower third quartile in teacher efficacy. School B fell in the mid third quartile in collaboration and teacher efficacy.

Teacher responses in rank order for collaboration, collegiality and teacher efficacy produced differences between School B and the other three schools in collaboration; with the most notable difference with School A. Schools C and D produced fairly stable

results. All four schools produced similar results in collegiality, again with Schools C and D producing static results. Relative differences were noted between Schools B and A. In teacher efficacy, differences were noted between Schools B and C. Schools D and A produced similar results. Tables 9, 10 and 11 present rank order comparisons between the four schools in collaboration, collegiality and teacher efficacy respectively.

Table 9

Collaboration Rank Order Scores

Rank Order	Mean	Standard Deviation
School B	18.21	3.70
School C	15.19	3.99
School D	15.15	3.60
School A	13.89	3.31

Table 10

Collegiality rank order scores

Rank Order	Mean	Standard Deviation
School B	23.93	4.55
School C	22.48	4.00
School D	22.33	4.82
School A	21.59	4.31

Table 11

Teacher Efficacy Rank Order Scores

Rank Order	Mean	Standard Deviation
School B	23.39	3.17
School D	21.33	3.35
School A	20.26	4.81
School C	18.67	3.75

A one-way ANOVA was calculated comparing teacher perceptions of the degree of collaboration at their schools. A statistically significant difference was found [$F(3,105) = 6.987, p < .001$]. Tukey's HSD was used to determine the nature of differences between the four schools. This analysis revealed that teacher perceptions at School B were rated higher ($\bar{x} = 18.21, s = 3.70$) than at School A ($\bar{x} = 13.89, s = 3.31$). No statistically significant differences were found among School A and School C ($\bar{x} = 15.19, s = 3.99$) or School D ($\bar{x} = 15.15, s = 3.60$); among School C and School A or School D; or between School D and School A or School C.

A one-way ANOVA was calculated comparing teacher perceptions of the degree of collegiality at their schools. No statistically significant difference was found [$F(3,105) = 1.344, p = .264$]. The teachers from all four schools did not rate the degree of collaboration statistically significantly from the others.

A one-way ANOVA was calculated comparing teacher perceptions of the degree of teacher efficacy at their schools. A statistically significant difference was found [(F(3,105) = 4.756, p = .004]. Tukey's HSD was used to determine the nature of differences among the four schools. This analysis revealed that teacher perceptions at School B were rated higher ($\bar{y} = 2.40$, $s = 3.167$) than at School C ($\bar{y} = 18.67$, $s = 3.75$). No statistically significant differences were found between School A or School D and any of the other schools. Furthermore, no statistically significant differences were found between School B or School C and School A or School D.

Comparison of FCAT Reading and Mathematics Scores

FCAT Reading and Mathematics percentile rank scores for 7th and 8th grade students with specific learning disabilities who attended the same middle school since Grade 6 were analyzed and compared across general education, resource room and separate class placements. Percentile rank scores were recorded for all students who participated in FCAT assessments in March of 2001, 2002, 2003 and 2004.

One hundred forty eight students with specific learning disabilities comprise the student sample. There are 41 students from School A; 48 from School B; 29 from School C and 39 from School D. Altogether, 49 of these students with specific learning disabilities from the student sample are placed in general education settings. Five students are from School A; 23 from School B; 13 from School C and 8 from School D. Seventy-six students from this sample are placed in resource room settings. Twenty-seven of the students are from School A; 10 from School B; 13 from School C and 26

from School C. Altogether, 23 students from this sample are placed in separate class settings. Eight students are from School A; 8 from School B; 3 from School C and 4 from School D. Demographic information of the number of students in general education, resource room and separate class placement are presented in Table 12.

Table 12
Demographic Compositions Of Students By Placement

School	General Education	Resource Room	Separate Class	Total SLD Population
School A	5	27	8	40
School B	23	10	8	41
School C	13	13	3	29
School D	8	26	4	38
Total Sample	49	76	23	148

Reading

A one-way ANOVA was computed comparing FCAT Reading Normed Referenced Tests percentile rank scores for students with specific learning disabilities across general education, resource class and separate class placements. A statistically significant difference among these placement options was found in each of the four years tested.

Analysis of 2001 FCAT Normed Referenced Tests in Reading Comprehension revealed a statistically significant difference among the three placement options [$F(2,118) = 14.874, p < .001$]. Tukey's HSD was used to determine the nature of the differences among the three placement options. Students in general education placements scored higher ($\bar{x} = 30.56, sd = 22.14$) than those in resource class placements ($\bar{x} = 15.53, s = 14.09$) and separate class placements ($\bar{x} = 8.74, s = 7.95$).

Likewise, a statistically significant difference was found among the three placement options for 2002 Reading assessments [$F(2,135) = 34.678, p = .000$]. Tukey's HSD revealed the same relationships, as did the 2001 assessment. Again, students in general education placements scored higher ($\bar{x} = 33.53, s = 21.48$) than those in either resource class ($\bar{x} = 13.18, s = 9.65$) or separate class placements ($\bar{x} = 7.75, s = 8.10$).

Similarly, 2003 Reading FCAT results showed the same relationships, as did 2001 and 2002 assessments [$F(2, 141) = 25.011, p < .001$]. Tukey's HSD again revealed students in general education placements scored higher ($\bar{x} = 31.77, s = 20.50$) than those in either resource class ($\bar{x} = 14.37, s = 12.87$) or separate class placements ($\bar{x} = 7.76, s = 10.09$).

2004 Reading FCAT Reading percentile rank scores revealed the same relationships, as did 2001, 2002 and 2003 assessments [$F(2, 143) = 19.050, p < .001$]. Tukey's HSD revealed students in general education placements scored higher ($\bar{x} = 37.50, s = 22.03$) than those in resource class ($\bar{x} = 20.39, s = 18.13$) or separate class placements ($\bar{x} = 11.32, s = 10.06$). The same trend was apparent in all four years in that

students in general education placements scored higher than those in either resource or separate class placements. Furthermore, students in resource class placements scored higher than those in separate class placements. Students in resource class placements did not score statistically significantly higher than those in separate class placements in any of the four years.

Mathematics

A one-way ANOVA was computed comparing FCAT Normed Referenced Tests percentile rank scores in Mathematics Problem Solving for students with specific learning disabilities across general education, resource class and separate class placements. A statistically significant difference among these placement options was found in each of the four years tested.

Analysis of 2001 FCAT Normed Referenced Test in Mathematics Problem Solving revealed statistically significant differences among the three placement options [$F(2, 117) = 22.934, p < .001$]. Tukey's HSD was used to determine the nature of the differences among the three placement options. This analysis revealed students in general education placements scored higher ($\bar{X} = 35.42, s = 21.33$) than those in resource class ($\bar{X} = 15.80, s = 15.67$) or separate class placements ($\bar{X} = 9.28, s = 5.54$).

Similar differences were revealed for 2002 FCAT Mathematics results, as were apparent in 2001 [$F(2,135) = 51.722, p < .001$]. Tukey's HSD revealed students in general education placements scored higher ($\bar{X} = 39.11, s = 17.08$) than those in resource class ($\bar{X} = 14.17, s = 13.34$) or in separate class placements ($\bar{X} = 21.85, s = 7.31$).

Likewise, 2003 FCAT Mathematics results revealed the same relationships, as did 2001 and 2002 Mathematics assessments [$F(2, 141) = 35.357, p < .001$]. Tukey's HSD revealed students in general education placements scored higher ($\bar{x} = 43.13, s = 24.22$) than those in resource class ($\bar{x} = 18.41, s = 13.98$) or in separate class placements ($\bar{x} = 13.29, s = 8.36$).

Finally, 2004 FCAT Mathematics results revealed the same relationships, as did assessments from the three earlier assessments [$F(2, 143) = 37.316, p < .001$]. Tukey's HSD revealed the same relationships as with the earlier assessments. Students in general education placements scored higher ($\bar{x} = 47.04, s = 23.98$) than those in resource class ($\bar{x} = 21.29, s = 15.43$) or separate class placements ($\bar{x} = 14.59, s = 10.81$). Students in resource class placements did not score statistically significantly higher than those in separate class placements in any of the four test years.

Summary

An analysis of the data that was obtained from teachers at four middle schools to the School Culture Survey in May 2004, FCAT Reading and Mathematics percentile rank scores for students with specific learning disabilities from the years 2001, 2002, 2003 and 2005 and the placement of these students in general education, resource or separate class educational settings were presented in this chapter. The demographic composition of the survey population was presented. Data analysis, including tables, figures and supporting narratives for both research questions were presented. A description of the three key areas

of school culture at the four middle schools followed. Last, a description and analysis of FCAT Reading and Mathematics FCAT percentile rank scores of students with specific learning disabilities in grades seven and eight during the 2003-2004 school year were presented.

Chapter 5 presents a discussion and summary of these findings. Conclusions from these findings, recommendations for further research and for school and district-level ESE administration are presented.

CHAPTER 5

SUMMARY, CONCLUSIONS, AND RECOMMENDATIONS

Problem Statement

This study was designed to determine how well the three key areas of school culture (collaboration, collegiality and teacher efficacy) predict (a) the placement of middle school students with specific learning disabilities in general class or special education (resource and separate class) educational settings and (b) FCAT Reading and Mathematics scores of middle school students with specific learning disabilities.

Secondary analyses were also presented comparing and analyzing the three areas of school culture and relationships between FCAT Reading and Mathematics scores and the placement of students with specific learning disabilities in general education and special education (resource and separate) educational settings.

Methodology

Population and Data Collection

The population for this study consisted of middle school students with specific learning disabilities in Osceola County School District, a large district in central Florida. A representative sample of seventh and eighth grade students with specific learning disabilities was selected from four traditional middle schools.

The Resource Compliance Specialist (RCS) at each of the participating schools received a letter on April 23, 2004 explaining the scope of the research and to request their assistance to distribute surveys to participating teachers from their school.

One RCS who agreed to participate in collecting and assimilating the survey instruments at her school personally received sealed envelopes containing the prenotice letter and survey instruments on Wednesday, April 28, 2004. Survey participants at the remaining three schools received the prenotice letter on Monday, May 3 followed by the survey on Wednesday, May 5 through the school system interoffice mail. A token of appreciation consisting of a crisp one-dollar bill was enclosed with each survey instrument. A thank-you-reminder letter was mailed to all survey participants through interoffice mail on Monday, May 17, 2004. Replacement surveys were mailed to all non-responding teachers on Thursday, May 20, 2004. A final telephone or e-mail contact was made on Monday, May 24, 2004 to all non-responding teachers.

The first and second contacts yielded 69 returned surveys from the four schools, providing a 57.5% return rate. The third contact yielded a return of 14 additional surveys for an overall return rate of 70.83%. The fourth contact yielded 25 additional returned surveys, providing an overall return rate of 91.66%. The fifth contact yielded three more returned surveys. Overall, three completed surveys were deemed unusable, as these teachers did not respond to all 18-survey questions. Therefore, 109 usable surveys were returned providing a final return rate of 90.83%.

Instrumentation

The survey instrument, School Culture Survey, was used to collect data. This instrument was modified from Self-Assessment: School Culture Triage by Masden-Copas (2002). This original instrument was designed to assess the current condition of a school's culture. The survey instrument used in this study was further modified from Cunningham's 2003 School Culture Survey. With permission from both authors (see Appendices F and G), the researcher added two additional demographic items designed to fit the design and scope of this study.

In the development of the School Culture Survey, the researcher conducted an extensive review of the literature on school culture. Feedback on the instrument and the clarity of its items was obtained from a small sample of elementary and middle school teachers at Celebration School in Osceola County, Florida during the 2003 – 13004 school year.

The survey instrument used in this study was comprised of three sections, each containing five to seven questions plus demographic information. The three sections include: (a) collaboration (questions 1-5); (b) collegiality (questions 6-12); and (c) efficacy (questions 13-18). Responders were asked to rate each question using a five point Likert-type scale (1: Never; 2: Rarely; 3: Sometimes; 4: Often; and 5: Always). Respondents also provided data concerning personal and professional information consisting of: (a) years at current school; (b) total years of teaching experience; (c) whether current teaching assignment is in their area of certification; (d) area of certification; (e) race; (f) gender; and (g) current grade level(s).

Data Analysis

The researcher conducted all analyses of collected data using statistical software SPSS Graduate Pack 12.0 for Windows. All surveys were collected and separated by school using an alpha numerical code printed on each survey. The alpha numerical code identified the school and respondent for follow up during the data collection phase of this study. When follow up was completed, the respondent's name was deleted from the Excel 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-type scale (1: Never; 2: Rarely; 3: Sometimes; 4: Often; and 5: Always). Each respondent's scores for collaboration; collegiality; and efficacy were totaled and divided by the number of items in each of these key areas of school culture (collaboration: 5; collegiality: 7; and efficacy: 6) to identify that respondent's mean score for that key area.

Data for the 2001-2002, 2002-2003; and 2003-2004 FCAT NRT Reading comprehension and Mathematics problem solving scores for students with specific learning disabilities were obtained from the Just Five Clicks database maintained at Osceola County Public School's Intranet. FCAT percentile rank scores in Reading and Mathematics from 2001, 2002, 2003 and 2004 were used in the analysis of data.

Summary and Discussion of the Findings

The summary, analysis and discussion of the findings for the collected data in response to (1) the demographic composition of the survey sample; (2) the two research questions; and (3) secondary analysis (a) comparing and analyzing the three key areas of school culture (collaboration, collegiality and teacher efficacy); and (b) comparing FCAT Reading and Mathematics scores across three placement options (general education, resource and separate class) educational settings were as follows:

Demographic Composition of the Survey Sample

All four schools provided good response rates to the School Culture Survey, as all four schools produced a response rate of 90% or higher. School B produced a higher overall response rate to the survey (93.33%, as opposed to 90% at each of the other three schools.

When teaching experience at the current school was considered, a higher percentage of teachers at School B have taught 1-2 years at their current school, while a higher percentage of teachers at School C have taught for 3 to 9 years at their current school. A higher percentage of teachers from Schools B and D have taught from 10 to 14 years at their current school, while a higher percentage of teachers from Schools A and D have taught for fifteen or more years at their current school. These data might suggest that School D may have a stronger overall culture than the other three schools, while strong cultures may also exist at Schools A and B.

Considerably more teachers at School D (43%) have from 10 to 14 years of total teaching experience than at the other three schools. A relatively higher percentage of teachers at Schools A and B have fifteen or more total years teaching experience. A considerably higher percentage of teachers from School C (44%) have taught a total of 3 to 9 years.

Overall, teachers from all four schools showed high rates of certification in the subject areas they taught. However, nearly all of the 27 teachers (96%) at School D currently maintain this certification. This figure may suggest higher academic achievement in this school. Conversely, nearly three-quarters of the 27 teachers at this school were currently certified in general education, while from nearly forty to sixty percent of the teachers from the other three schools were currently certified in exceptional education. Thirty-four percent of the 27 teachers from School A and 44% of the 27 teachers from School C were currently certified in SLD. These figures may suggest teachers at these two schools were more knowledgeable about the needs of students with specific learning disabilities and implementing best practices for this population of students.

Surprisingly, over three-quarters (86%) of the 28 teachers from School B were Hispanic; a figure that represented at least three times the Hispanic teacher population from the other three schools. While 38.4% of the students in Osceola County are Hispanic, this figure may suggest teachers from this school may be more in tune to cultural nuances of this population of students.

Research Question 1

How well do the perceived levels of the three key areas of school culture (collaboration, collegiality and teacher efficacy), as measured by the School Culture Survey predict the placement of middle school students with specific learning disabilities in general class and special education (resource or separate class) educational settings?

In order to respond to Research Question 1, middle school students with specific learning disabilities were separated into their current educational placement (1) general education and (2) special education (resource and separate class) educational settings. Students who spend 79% or more of their school day with non-disabled peers were classified as general education. Students who spend less than 79% of their school day with non-disabled peers were classified as special education. A student whose IEP stated resource or separate class placements fell into the special education group. Classification Discriminant Analysis was used because covariance matrices across groups were not different to a statistically significant degree ($\text{sig} = 0.126$). However, a review of the squared canonical correlations suggested the function contributes little to successful classification, explaining only 1.3% of the variation of group membership. Furthermore, this result was not statistically significant and was not discussed further.

Research Question 2

What relationships (if any) exist between the perceived levels of each of the three key areas of school culture (collaboration, collegiality and teacher efficacy), as measured by the School Culture Survey and FCAT Reading and Mathematics scores of middle school students with specific learning disabilities?

Regression analysis revealed no statistically significant relationships between the dependent variables (FCAT Reading and Mathematics scores) and any of the three independent variables (collaboration, collegiality and teacher efficacy).

Regression analysis of the perceived levels of collaboration (questions 1 through 5) indicated no statistically significant relationship ($R^2 = 0.004$) between the collaboration scores and 2004 FCAT percentile rank scores in Reading Comprehension of middle school students with specific learning disabilities: [$F(1, 107) = .452, p = .503$]. Similarly, regression analysis of the perceived levels of collaboration indicated no statistically significant relationship ($R^2 = 0.004$) between collaboration scores and 2004 FCAT percentile rank scores in Mathematics Problem Solving of this sample of middle school students: [$F(1, 107) = .410, p = .523$]. These relationships explain less than 1 percent of the variance. The analysis demonstrated the collaboration section of the School Culture Survey does not predict FCAT Reading or Mathematics scores for this sample of middle school students with specific learning disabilities.

Regression analysis of the perceived levels of collegiality (questions 6 through 12) indicated no statistically significant relationship ($R^2 = 0.006$) between the collaboration scores and 2004 FCAT percentile rank scores in Reading Comprehension of middle school students with specific learning disabilities: [$F(1, 107) = .691, p = .408$].

Similarly, regression analysis of the perceived levels of collegiality indicated no statistically significant relationship ($R^2 = 0.001$) between collegiality scores and 2004 FCAT percentile rank scores in Mathematics Problem Solving of this sample of middle school students: $[F(1, 107) = .0961, p = .758]$. Similar to the relationships between collaboration and FCAT Reading and Mathematics scores, these relationships explain less than 1 percent of the variance. The analysis demonstrated the collegiality section of the School Culture Survey does not predict FCAT Reading or Mathematics scores for this sample of middle school students with specific learning disabilities.

Regression analysis of the perceived levels of teacher efficacy (questions 13 through 18) indicated no statistically significant relationship ($R^2 = 0.010$) between the teacher efficacy scores and 2004 FCAT percentile rank scores in Reading Comprehension of middle school students with specific learning disabilities: $[F(1, 107) = 0.067, p = .796]$. Similarly, regression analysis of the perceived levels of teacher efficacy indicated no statistically significant relationship ($R^2 = 0.01$) between teacher efficacy scores and 2004 FCAT percentile rank scores in Mathematics Problem Solving of this sample of middle school students: $[F(1, 107) = 1.061, p = .305]$. These relationships explain less than 1 percent of the variance in Reading and 1 percent of the variance in Mathematics. The analysis demonstrated the teacher efficacy section of the School Culture Survey does not predict FCAT Reading or Mathematics scores for this sample of middle school students with specific learning disabilities.

Secondary Analyses

Analysis and Comparison of Three Key Areas of School Culture

Teacher perceptions of the degree of collaboration, collegiality and teacher efficacy ranged from the mid second quartile to the mid third quartile. Teacher responses in rank order for collaboration, collegiality and teacher efficacy produced differences between School B and the other three schools in collaboration; with the most notable difference with School A. Schools C and D produced fairly static results. All four schools produced similar results in collegiality, again with Schools C and D producing static results. Relative differences were noted between Schools B and A. In teacher efficacy, differences were noted between Schools B and C. Schools D and A produced similar results.

Since differences between teachers' perceptions of collaboration and teacher efficacy were found, one-way ANOVAs were calculated to compare teacher perceptions of the degree of (a) collaboration, (b) collegiality and (c) teacher efficacy in their schools. Statistically significant differences were found between teacher perceptions of collaboration in their schools [$F(3, 105) = 6.987, p = .000$]. Tukey's HSD revealed teacher perceptions in School B was rated higher than at School A. No statistically significant differences were found between teacher perceptions of the degree of collegiality at their schools [$F(3, 105) = 1.344, p = .264$]. Statistically significant differences were found between teacher perceptions of the degree of teacher efficacy at

their schools. [$F(3, 105) = 4.756, p = .004$]. Tukey's HSD revealed teacher perceptions at School B were rated higher than at School C.

Comparison of FCAT Reading and Mathematics Scores

Statistically significant differences between FCAT percentile rank scores in Reading Comprehension and Mathematics Problem solving were found in each of the four years tested, as indicated below:

1. 2001 Reading Comprehension: [$F(2, 118) = 14.874, p = .000$],
2. 2001 Mathematics Problem Solving: [$F(2, 117) = 22.934, p = .000$];
3. 2002 Reading Comprehension: [$F(2, 135) = 34.678; p = .000$],
4. 2002 Mathematics Problem Solving: [$F(2, 135) = 51.722, p = .000$];
5. 2003 Reading Comprehension: [$F(2, 141) = 25.011, p = .000$],
6. 2003 Mathematics Problem Solving: [$F(2, 141) = 35.357, p = .000$];
7. 2004 Reading Comprehension: [$F(2, 143) = 19.050, p = .000$] and
8. 2004 Mathematics Problem Solving: [$F(2, 143) = 37.316, p = .000$].

Tukey's HSD revealed students in general education placements scored higher in both Reading Comprehension and Mathematics Problem Solving than those in both resource and separate class placements in each of the four years tested. No statistically significant differences were found between resource and separate class placements in any of the years tested. Although these findings do not appear to be related to school culture perceptions, they seem to validate the placement decisions made by the respective IEP committees.

Conclusions

This study sought to determine (a) how well the three key areas of school culture (collaboration, collegiality and teacher efficacy) predict the placement of middle school students with specific learning disabilities in general class or special education (resource and separate class) educational settings and (b) relationships (if any) between each of the three key areas of school culture (collaboration, collegiality and teacher efficacy) and FCAT scores in Reading Comprehension and in Mathematics Problem Solving. After conducting a review of professional literature and research findings, the following conclusions were drawn:

1. It was found that teachers' perceptions of the levels of collaboration, collegiality and teacher efficacy, as measured by the School Culture Survey does not predict the placement of middle school students with specific learning disabilities in general education or special education (resource and separate class) educational settings in this sample.
2. It was found that there are no relationships between teacher perceptions of the levels of collaboration, collegiality and efficacy, as measured by the School Culture Survey and middle school students with specific learning disabilities FCAT Reading and Mathematics scores in this sample.
3. It was found that there was a statistically significant relationship between teacher perceptions of collaboration on the School Culture Survey at the four middle schools. Specifically, statistically significant differences between

teacher perceptions were found between School B ($\bar{x} = 18.21$; $s = 3.69$) and School A ($\bar{x} = 13.89$; $s = 3.31$).

4. It was found that there was no statistically significant relationship between teacher perceptions of collegiality on the School Culture Survey at the four middle schools.
5. It was found that there was a statistically significant relationship between teacher perceptions of teacher efficacy on the School Culture Survey at the four middle schools. Specifically, statistically significant differences between teacher perceptions were found between School B ($\bar{x} = 22.39$; $s = 3.166$) and School C ($\bar{x} = 18.67$; $s = 3.75$).
6. It was found that there were no statistically significant relationships among FCAT scores in Reading Comprehension and in Mathematics Problem Solving for middle school students with specific learning disabilities in general education and both resource and separate class placements in this sample. However, statistically significant differences were found among students in general education and those in both resource room and separate class placements.
7. It was found that there were no statistically significant relationships between FCAT scores in Reading Comprehension and in Mathematics Problem Solving for middle school students with specific learning disabilities in resource or separate class placements in this sample.

8. It was found that schools with a higher percentage of teachers with current certification in specific learning disabilities did not affect any difference in the FCAT Reading and Mathematics scores of the students in their school with specific learning disabilities in this sample. One possible explanation for this finding may be that ESE teachers in this sample are not certified in Reading or in Mathematics.
9. It was found that the number of years teachers have taught in their current schools did not make a difference in FCAT Reading and Mathematics scores of students with specific learning disabilities in this sample.
10. It was found that teachers' total years of teaching experience did not make a difference in FCAT Reading and Mathematics scores of students with specific learning disabilities in this sample.
11. It was found that the school whose teachers reported the strongest level of collaboration, collegiality and teacher efficacy had statistically significantly more Hispanic teachers than what was reported at any of the other three schools.
12. It was found that the 2004 Florida school grades for the four schools and the schools' rank order of teacher perceptions of teacher efficacy were congruent with one another. Schools B and D were rated B schools, while Schools A and C were rated C schools. Responding teachers at Schools B and D perceived a stronger level of teacher efficacy at their schools than that perceived at Schools A and C.

Implications and Recommendations

Bolman and Deal (1977) posited that dominant organizational values are reflected through (a) high performance expectations of both teachers and students, (b) low absenteeism rates, (c) low drop out rates and (d) high efficiency. Stoll and Fink (1996) contended understanding school culture is vital to positive school improvement outcomes. School culture is profoundly influenced by school effectiveness research. These researchers viewed school cultures across two continuums: (a) effective to ineffective and (b) improving to declining. According to Saphier and King (1985), school culture is inherent in cultural norms. Four cultural norms these researchers linked to school improvement include:

1. Shared goals articulated through a shared vision focusing on teaching, learning and student outcomes,
2. Team responsibility for positive and negative outcomes,
3. Continuous professional development demonstrated through a shared commitment to lifelong learning, and
4. An atmosphere of openness, caring and respect for others.

Corrie (1995) established a link between the length of service of professional staff and a collaborative culture. Peterson (2002b) linked professional collaboration with collegial relationships. Cultures boasting strong professional collaboration share the following characteristics: (a) extensive sharing of professional information, (b) more elaborate problem-solving endeavors, (c) robust professional networks, and (d) increased job satisfaction.

Peterson and Deal (1998) asserted that school leaders are instrumental in shaping a school culture. Through communicating core values as they verbally and non-verbally interact with school administrators, teachers, support staff, parents and students. These leaders recognize, honor and revere heroes and heroines for their accomplishments, speak eloquently of the underlying school mission and celebrate the accomplishments of students, staff and the community.

Blase and Blase (2001b) asserted that effective leaders carefully employ the transformational leadership style. Through the employment of this leadership style, teachers are encouraged to employ innovation and problem solving. Teaching teams combine collaboration, peer coaching, inquiry, collegial study groups and reflective dialogue in their classrooms.

There have been few studies that linked collaboration, collegiality and teacher efficacy with student achievement. The study of relationships between school culture and the academic achievement of students with disabilities represent an area yet to be researched. The present study was developed to determine (a) how well school culture predicts the educational placement of middle school students with specific learning disabilities in general education or special education settings and (b) if relationships between culture and the academic achievement of these students exist.

The present study identified strong cultures in all four schools studied. Teacher perceptions of the level of collaboration, collegiality and teacher efficacy in their schools fell within the third quartile on the School Culture Survey. Wagner and Masden-Copas (2002) contended that schools that fall within the third quartile have developed a strong

culture, but should continue to monitor and make positive improvements. Each of the four schools studied boasts a high degree of collaboration, collegiality and teacher efficacy, and this similarity did not lend itself to detecting differences among these four schools. Therefore no relationships were found among these school cultures and FCAT Reading and Mathematics scores of middle school students with specific learning disabilities in this sample.

These results imply the need to provide well-organized staff development opportunities for general education and special education teachers. This implication is consistent with recent research findings. Pardini (2002) linked well-organized teacher induction programs with positive school cultures. According to Pardini, effective instruction results in teachers believing they are an integral part of the school family. Astute site-based and district-level school administrators should implement Lyman and Foyle's (1998) contention that optimal staff development sessions take place in small, heterogeneous groups allowing group discussions and brainstorming activities. Each group should consist of a combination of ESE and general education teachers who teach the same or similar grade levels. Staff development opportunities should include school-based and district-based activities to provide teachers with opportunities to network with other teachers to expand their perception of best practices for students with specific learning disabilities. School leaders should encourage teachers to take graduate-level courses, read professional literature and attend professional conferences whenever possible to supplement knowledge gained through district-level workshops.

The present study found statistically significant differences between FCAT Reading and Mathematics scores for middle school students with specific learning disabilities in general education, as opposed to special education placements. This finding suggests the need to provide ESE teachers with training and technical assistance in the area of curriculum and assessment practices; specifically content knowledge in core academic subject areas. Including ESE teachers in grade level and department meetings and professional development opportunities would be an excellent starting point. Next, teams of ESE and general education teachers could attend workshops presented by content-based district-sanctioned curricula for all core academic areas. District-level ESE and content-area program specialists could then provide follow-up training to assist teaching teams to implement best practices in their schools. Additional staff development opportunities should follow the model presented in the discussion of providing continuous professional development opportunities.

District-level ESE program specialists could provide teachers with resources and linkages to community, state and federal advocacy networks. State-level training through the Florida Inclusion Network could provide teams of teachers with new ideas and best practices for including students with disabilities in a wider range of educational opportunities with their age peers. Novice teachers could have opportunities to shadow master teachers to provide them with necessary active learning experiences to personalize information gained through workshops, conferences and Reading professional literature.

Other implications of the finding that statistically significant differences were found between Reading and Mathematics scores for students in general education, as

opposed to ESE placements impact scheduling students for core academics and elective classes. Providing appropriate accommodations and modifications for students with learning disabilities will allow a greater number of these students to successfully access learning opportunities in core academics and elective classes offered in the general education classroom. These opportunities may, in turn, lead to increased opportunities for students with specific learning disabilities in the workplace.

Today, considerable emphasis is placed on data-driven decision-making and best practices in curriculum and instruction. Therefore, astute school leaders gather data on the culture of their school, evaluate strengths and weaknesses, develop action plans for improvement and continue to monitor their overall school culture. School culture data could be gathered through using the School Culture Survey used in this study or other culture surveys, such as Stoll and Fink (1996) or Wagner and Masden-Copas (2002).

Recommendations for Further Research

Further research needs were developed using the data analyses from this study, and include:

1. This study could be repeated with a larger sample size allowing in-depth comparisons between schools with weak, moderate and strong cultures for middle school students with specific learning disabilities. Analyses could focus on learning gains, rather than achievement scores.
2. This study could be repeated using another measure of student achievement, such as the Woodcock-Johnson III Tests of Achievement using a larger sample

size comparing elementary with middle school populations of students with specific learning disabilities.

3. This study could be repeated with a larger sample size measuring gains in academic achievement comparing students with mild disabilities (specific learning disabilities, language impaired and physically impaired students) across elementary and middle schools.
4. This study could be repeated with a larger sample size comparing academic achievement gains, attendance rates and drop out rates for students with specific learning disabilities across elementary, middle school and high schools in the same school district.
5. This study could be repeated with a larger sample size comparing gains in academic achievement of students with mild disabilities using a different measure of academic achievement with another at-risk population, such as English for Speakers of Other Languages (ESOL).
6. This study could be repeated with a larger sample size comparing differences in academic growth of students with mild disabilities versus students from another at-risk population in classes taught by certified versus non-certified teachers in specified core academic content areas.

APPENDIX A

RCS LETTER

April 23, 2004

Resource Compliance Specialist
St. Cloud Middle School
1975 S. Michigan Avenue
St. Cloud, Florida 34769

Dear RCS:

I will be conducting research for my Doctoral Dissertation at our six middle schools. My study will compare and analyze the relationship between school culture, as perceived by teachers and the academic achievement and placement of middle school students with learning disabilities. I will randomly select 25 general education teachers and 5 ESE teachers (RCS, SLP and VE) at each school. In order to complete my survey research I am asking for your assistance. As a token of my appreciation, I would like to treat the six RCS's to lunch (at a time and restaurant agreeable to the group).

I will be asking for your assistance in three ways: First, I will need a list of the teachers at your school and if possible the subject each teaches. Would you be able to secure this list for me and fax it to me at Celebration (407) 566-2354 by Monday or Tuesday of next week? Second, in order to increase response rates, I will be utilizing the Tailor Design method of survey research consisting of up to five contacts for each survey participant. Included in these contacts will be a prenotice letter, cover letter with initial survey, thank-you or reminder post card and replacement survey. To complete these contacts, the prenotice letter and initial survey will be sent to each participant during the first week in May, and the thank you post card or reminder letter will be mailed two weeks later. If I forward to you the prenotice letter and cover letter with the initial survey; and the thank you postcard or reminder postcard two weeks later, would you be able to have the mail delivery person at your school distribute them in teachers' mailboxes for me?

Please call me at Celebration (407) 566-2300 Extension 241 or through County e-mail with your response. Also, please tell me your first, second and third choices for a restaurant for lunch (on me). I have attached a description of my research. Please feel free to contact me at your convenience with any questions or concerns. You may feel free to contact me on my cell phone at (407) 873-2589.

I am thanking you in advance for your consideration of my request for assistance. I will look forward to speaking with you.

Joan Quiambao
RCS, Celebration School K-8

APPENDIX B
SURVEY INSTRUMENT

SCHOOL CULTURE SURVEY

Part I:

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

1. Never	2. Rarely	3. Sometimes	4. Often	5. Always
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START HERE

1	Teachers and staff discuss instructional strategies and curriculum issues	1	2	3	4	5
2	Teachers and staff work together to develop the school schedule.	1	2	3	4	5
3	Teachers and staff are involved in the decision-making process with regard to materials and resources.	1	2	3	4	5
4	The student behavior code is a result of collaboration and consensus among staff.	1	2	3	4	5
5	The planning and organizational time allotted to teachers and staff is used to plan as collective units / teams, rather than as separate individuals.	1	2	3	4	5
6	Teachers and staff tell stories of celebrations that support the school's values.	1	2	3	4	5
7	Teachers and staff visit / talk / meet outside of the school to enjoy each other's company.	1	2	3	4	5
8	Our school reflects a true "sense" of community.	1	2	3	4	5
9	Our school schedule reflects frequent communication opportunities for teachers and staff.	1	2	3	4	5
10	Our school supports and appreciates the sharing of new ideas by members of our school.	1	2	3	4	5
11	There is a rich and robust tradition of rituals and celebrations, including holidays, special events and recognition of goal attainment.	1	2	3	4	5
12	Teachers and staff represent and appreciate each other's specific talents.	1	2	3	4	5
13	When something is not working in our school, the faculty and staff predict and prevent, rather than react and repair.	1	2	3	4	5

CONTINUE HERE

1. Never	2. Rarely	3. Sometimes	4. Often	5. Always
-----------------	------------------	---------------------	-----------------	------------------

14	School members are interdependent and value each other.	1	2	3	4	5
15	Members of our school community seek alternatives to problems / issues, rather than repeating what we have always done.	1	2	3	4	5
16	Members of our school community seek to define the problem / issue, rather than to blame others.	1	2	3	4	5
17	The school staff is empowered to make instructional decisions, rather than waiting for supervisors to tell them what to do.	1	2	3	4	5
18	People work here because they enjoy it and choose to be here.	1	2	3	4	5

Part II:

Instructions: Please rate each demographic item. For each item, circle the appropriate response.

19	Your years teaching at current school	0-2	3-9	10-14	15 or more
20	Your years total teaching experience	0-2	3-9	10-14	15 or more
21	Is your current teaching assignment in your area of certification?	No		Yes	
22	Area of certification	Gen Ed	VE	SLD	Other
23	Your race	Black	Hispanic	White	Asian Other
24	Your gender	Male		Female	
25	Your grade level (Circle all that apply.)	6	7	8	

A revised version of survey by: Wagner, C. & Masden-Copas, P. (2002) An audit of the culture with two handy tools. Journal of Staff Development, 23 (3), 42-53.

****Thank you for your time in completing this survey. Please return your completed survey in enclosed envelope. ****

APPENDIX C
PRENOTICE LETTER

May 3, 2004

Dear teaching colleague,

A few days from now, I will send you a request through Interoffice Mail to fill out a brief questionnaire to help determine relationships, if any between school culture and academic achievement of middle school students with Specific Learning Disabilities. This research is being completed for my Doctoral Dissertation at the University of Central Florida.

It concerns measuring school culture at your school as perceived by teachers. When the 2004 FCAT scores are available, 2001, 2002, 2003 and 2004 aggregate Reading and Mathematics scores will be recorded for eighth grade students and 2002, 20003 and 2004 aggregate Reading and Mathematics scores will be recorded for seventh grade students in regular class, resource class and separate class placements. This study is an important one, as it will help the School District of Osceola County Exceptional Student Education to provide teachers with professional development opportunities aimed to maximize academic achievement for ESE students.

Thank you for your time and consideration. It is only with your generous help that this dissertation research will provide Osceola County Exceptional Student Education with data to determine relationships, if any between school culture and academic achievement of middle school students with Specific Learning Disabilities.

Appreciatively,

Joan Quiambao
Resource Compliance Specialist
Celebration School K-8

P.S. I will enclose a small token of appreciation with the questionnaire as a way of saying thanks.

APPENDIX D
FIRST COVER LETTER

May 5, 2004

Dear Teaching Colleague:

I am writing to ask for your help in determining relationships, if any between school cultures as perceived by teachers and academic achievement of middle school students with Specific Learning Disabilities. This study will help Osceola County Exceptional Student Education to provide teachers with professional development opportunities aimed to maximize academic achievement for ESE students. I am contacting a random sample of twenty-five regular education teachers and ESE teachers who provide direct services in the Varying Exceptionalities Program to ask their perceptions of school culture.

Your responses are completely confidential; I will release them only as summaries and will not identify any individual responses. When I receive your completed questionnaire, I will delete your name from the mailing list. I assure you that no connections between your name and responses will be made. However, you can help me tremendously by taking a few minutes to tell me your perceptions of school culture at your school. If for some reason you choose not to respond, please return the blank questionnaire in the enclosed stamped envelope.

I have enclosed a small token of appreciation as a way of saying thank you for your help.

If you have any questions or comments about this study I would be happy to talk with you. My number is 407-566-2300 Extension 241.

Thank you very much for helping with this important study.

Appreciatively,

Joan Quiambao
Resource Compliance Specialist
Celebration School K-8

APPENDIX E

THANK YOU / REMINDER LETTER

May 17, 2004

Last week a questionnaire seeking your opinion about the culture in your school was mailed to you. Your name was drawn randomly from a list of all teaching staff at your school.

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 by asking teachers like you to share your interpretation of your school's culture I can see if any relationship exists between your school culture and the achievement of and placement of students with learning disabilities. Your opinion is vital in my attempt to determine if possibly enhancing a school's culture may be an effective way to close the achievement gap between students with learning disabilities and students without disabilities.

If you did not receive a questionnaire, or if it was misplaced, please call me at Celebration School at (407) 566-2300 Extension 241 or send me an email at quiambaj@osceola.k12.fl.us and I will be happy to send you one through interoffice mail today.

Appreciatively,

Joan E. Quiambao
Resource Compliance Specialist
Celebration School

APPENDIX F
SECOND COVER LETTER

May 20, 2004

Dear Teaching Colleague:

About two weeks ago, I sent a questionnaire to you that asked about your perceptions of your school's culture. To the best of my knowledge, it has not yet been returned.

The comments of people who have already responded include a wide range of perceptions ranging from strong collaborative teams to school administrators making decisions. I think the results are going to be very useful in helping Osceola County's Exceptional Student Education leaders to develop professional development opportunities responsive to your needs.

I am writing again because of the importance that your questionnaire has for helping to get accurate results. Although I sent questionnaires to teachers in Osceola County middle schools, it is only by hearing from nearly everyone in the sample that I can be sure the results are truly representative. A comment on my survey procedures: A questionnaire identification number is printed on the top left hand corner of the questionnaire so I can check your name off 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 teachers' 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 in the enclosed interoffice envelope.

Sincerely,

Joan E. Quiambao
Resource Compliance Specialist
Celebration School K-8

P.S. If you have any questions, please feel free to contact me at Celebration School at (407) 566-2300 Extension 241.

APPENDIX G
E-MAIL CONTACT

From: Joan Quiambao

Sent: Monday, May, 24, 2004 7:55 AM

To: Teachers (Kissimmee Middle School, Neptune Middle School, Parkway Middle School, St. Cloud Middle School)

Subject: Surveys

Dear Teachers:

I sincerely appreciate so many of you responding to the surveys I sent out earlier this month as part of my doctoral dissertation at UCF. I have heard from 106 teachers, which leaves 14 who have not yet responded to the survey. Since I will be compiling the data during the summer, I will appreciatively accept the surveys through May 27, the last day of school. Thank you for your assistance.

With appreciation, I thank you for your assistance with this project.

Joan Quiambao, Resource Compliance Specialist
Celebration School

APPENDIX H

PERMISSION TO REVISE ORIGINAL SURVEY INSTRUMENT



WEB E-MAIL



Home Email Site Search Maps Technical Support

Eng

Search The Web Yellow Pages



- Inbox
- Compose
- Folders
- Addresses
- Get POP mail
- Options
- Help
- Logout

Read Message Previous Next Back to: Inbox

From: CWRIDER@aol.com
Date: 2004/03/25 Thu PM 12:19:33 EST
To: jquiambao@bellsouth.net
Subject: Re: Permission to revise servey

Reply Reply All Forward Delete Move To: (Choose Folder)

MailGuard Options

CENTER FOR IMPROVING SCHOOL CULTURE

CREATING BETTER PLACES TO LEARN
 Email from Christopher R. Wagner, Ph.D.

What is MailGuard?

Hello Joan,

As a professional courtesy, you have my permission to revise and use the S Triage Survey as an instrument in your doctoral study. I may be of assistance efforts to establish reliability and validity of the survey. Did you, by chance, study?

Kindest regards,

Chris

Reply Reply All Forward Delete Move To: (Choose Folder)

Search Messages

Previous Next Back to: Inbox



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APPENDIX I

PERMISSION TO USE REVISED SURVEY INSTRUMENT



WEB E-MAIL

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From: "Cunningham, Brenda" <cunninb@ocps.k12.fl.us>
Date: 2004/03/23 Tue PM 12:06:01 EST
To: <jquiambao@bellsouth.net>
Subject: RE: Survey Instrument

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Joan: The survey instrument is not original with me. It's fine with if you would like to use it, but I would also recommend getting in tou with the original author and get his permission. I attached a copy of my dissertation and please reference Appendix E for the e-mail address of Dr. Chris Wagner. You can also check the reference list and get th original instrument as published in the Journal of Staff Development. If you have any questions, feel free to e-mail. Thanks!

-----Original Message-----

From: jquiambao@bellsouth.net [mailto:jquiambao@bellsouth.net]
Sent: Tuesday, March 23, 2004 9:22 AM
To: Cunningham, Brenda
Cc: dmagann@mail.ucf.edu
Subject: Survey Instrument

Brenda,

Dr. Magann is also my major professor. My dissertation will be very similar to yours. I am measuring the effect of school culture, if any, on the placement of middle school SLD students; and their academic achievement, as measured by reading and math FCAT scores. Dr. Magann suggested I consider using your survey instrument. I believe your instrument would be perfect for my study with a minor revision of the demographic information. Since I will be looking at the middle school ESE population, I would add the following demographic questions:

1. What is your area of certification?
2. Are you currently teaching in field?

Would you be willing to grant me written permission to use your survey instrument with the above revisions? You may contact me at the followi numbers:

Home (this week or on weekends) (386) 756-1013
 Cell (anytime) (407) 873-2589
 Work (407) 566-2300 Extension 241

Thank you,

Joan Quiambao
 Resource Compliance Specialist

http://webmail.bellsouth.net/cgi-bin/gx.cgi/AppLogic+mobmain?msgvw=INBOXMN382... 10/13/2004

APPENDIX J
PERMISSION FOR HUMAN SUBJECTS



THE UNIVERSITY OF CENTRAL FLORIDA
INSTITUTIONAL REVIEW BOARD (IRB)

IRB Committee Approval Form

PRINCIPAL INVESTIGATOR(S): Joan Quiambao

PROJECT TITLE: An Analysis and Comparison of School Culture with Academic Achievement of Middle School Students with Specific Learning Disabilities.

Committee Members:

- Dr. Theodore Angelopoulos: _____
- Ms. Sandra Browdy: _____
- Dr. Jacqui Byers: _____
- Dr. Ratna Chakrabarti: _____
- Dr. Karen Dennis: _____
- Dr. Barbara Fritzsche: _____
- Dr. Robert Kennedy: _____
- Dr. Gene Lee: _____
- Ms. Gail McKinney: _____
- Dr. Debra Reinhart: _____
- Dr. Valerie Sims: _____

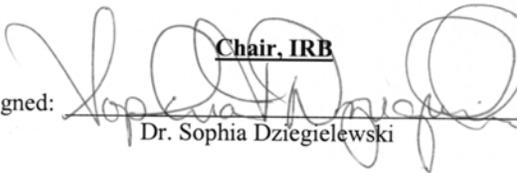
Contingent Approval
Dated: _____

Final Approval
Dated: _____

Expedited
Dated: 7 Apr 2004

Exempt
Dated: _____

Chair, IRB

Signed: 
Dr. Sophia Dziegielewski

NOTES FROM IRB CHAIR (IF APPLICABLE): _____

LIST OF REFERENCES

- Ainscow, M. (Ed). (1991). *Effective schools for all*. London: David Fulton Publishers.
- Allinder, R. (1995). An examination of the relationship between teacher efficacy and curriculum-based measurement and student achievement. *Remedial & Special Education, 16*, (4), 247-254. Retrieved March 15, 2004, from EBSCOhost database.
- Amendments to the Individuals with Disabilities Education Act, P.L. 105-17 (1997). Available at: [Http://www.ideapractices.org/law/IDEAMAIN.HTM](http://www.ideapractices.org/law/IDEAMAIN.HTM). U.S. Department of Education, Washington DC: Author, (ERIC Document Reproduction Services No. ED 419 315).
- Astuto, T., & Clark, D. (1995) Activators and impediments to learner centered schools. *Theory into Practice, 34*, (4), 314-329.
- Bempechat, J. (1991). *The role of parent involvement in children's academic achievement. A review of the literature*. New York: ERIC Clearinghouse on Urban education, teachers College, Columbia University.
- Blase, J., & Blase, J. (2001a). *Empowering teachers: What successful principals do*. Thousand Oaks, CA: Corwin Press, Inc.
- Blase, J. & Blase, J. (2001b). The teacher's principal. *Journal of Staff Development, 22*, (1), 22-25.
- Bolman, L., & Deal, T. (1997). *Reframing organizations: Artistry, choice, and leadership (2nd ed.)*. San Francisco, CA.: Jossey-Bass.
- Burrello, L., Lashley, C., & Beatty, E. (2001). *Educating all students together*. Thousand Oaks, California: Corwin Press, Inc.
- Busher, H., & Blease, D. (2000). Growing collegial cultures in subject departments in secondary schools: working with science staff. *School Leadership & Management, 20*, (1), 99-112.
- Christenson, M., Eldredge, F., Ibom, K., Johnson, M & Thomas, M. (1996). Collaboration in support of change. *Theory into Practice, 35*, (3), 187-195.
- Corrie, L. (1995). The structure and culture of staff collaboration: Managing meaning and opening doors. *Educational Review, 47*, (1), 89-99. Retrieved March 15, 2004 from EBSCOhost database.

- Cunningham, B. (2003). *A study of the relationship between school culture and student achievement*. (Doctoral Dissertation, University of Central Florida, 2003).
- Davies, D. (1991). School reaching out: Family, school and community partnerships for student success. *Phi Delta Kappan*, 72, (1), 376-382.
- Deal, T., & Kennedy, A. (1982). *Corporate cultures*. Reading, MA. Addison & Wesley.
- Deci, E., & Chandler, C. (1986). The importance of motivation for the future of the LD field. *Journal of Learning Disabilities* 19, 587-594.
- Dillman, D. (2000). *Mail and Internet surveys-the tailored design method (2nd edition)*. New York, New York: John Wiley & Sons.
- Edmonds, R. (1979). Effective schools for the urban poor. *Educational Leadership* (37), 15-37. (Retrieved September 23, 2003 from the EBSCO Host database.)
- Elementary and Secondary Education Act as Amended by the Improving America's Schools Act of 1994, P.L. 103-382 (1994). Available at: <http://www.ed.gov/legislation/ESEA/toc.html>. U.S. Department of Education, Washington DC: Author. (Eric Document Reproduction Service No. ED 379 792).
- Freiberg, H. (Ed). (1999). *School Climate: Measuring, Improving, and Sustaining Healthy Learning Environments*. Philadelphia, Pennsylvania: Falmer Press.
- Fullan, M. (1998). Leadership for the 21st century: Breaking the bonds of dependency. *Educational Leadership*, 56, (1), 6-10).
- Fullan, M. (2001). *Leading in a culture of change*. San Francisco: Josey-Bass.
- Fullan, M., & Hargreaves, A. (1991). *What's worth fighting for?* Ontario: Ontario Public School Teachers' Federation.
- Goals 2000: Education America Act. (1994). P.L. 103-327. U.S. Department of Education, Washington, DC: Author. (ERIC Document Reproduction Service No. ED 389 130).
- Goddard, R. (2002). A theoretical and empirical analysis of the measurement of collective efficacy: The development of a short form. *Educational and Psychological Measurement*, 62, (1), 97-110.
- Gruenert, S. (2000). Shaping a new school culture. *Contemporary Education*, 71, (2), 14-17. Retrieved March 15, 2004 from EBSCOhost database.

- Hargreaves, A., & Fullan, M. (2000). Mentoring in the new millennium. *Theory into Practice*, 39, (1), 50-57. Retrieved March 15, 2004 from EBSCOhost database
- Howells, K. (2000). Boldly going where angels fear to tread. *Intervention in School & Clinic*, 35, (3), 157-160. Retrieved March 15, 2004 from EBSCOhost database.
- Kaye, B., & Jacobson, B. (1999). True tales and tall tales: The power of organizational storytelling. *Training and Development*, 53, (3), 44-50.
- Lyman, L., & Foyle, H.C. (1998). Facilitating collaboration in schools. *Teaching and Change*, 5, (34), 312-339.
- O'Neil, J., & Conzemius, A. (2002). Four keys to a smooth flight. *Journal of Staff Development*, 23, (2), 14-18.
- Pardini, P. (2002). Stitching new teachers into the school's fabric. *Journal of Staff Development*, 23, (3), 23-26.
- Peterson, K. (2002a). Positive or Negative. *Journal of Staff Development*, 23, (3), 10-15.
- Peterson, K. (2002b). Building collaborative cultures: Seeking ways to reshape urban schools. (Monograph). Retrieved June 26, 2004 from <http://www.ncrel.org>.
- Peterson, K., & Deal, T. (1998). How leaders influence the culture of schools. *Educational Leadership*, 56, (10), 28-30.
- Roach, V., Salsibury, C., & McGregor, G. (2002). Applications of a policy framework to evaluate and promote large-scale change. *Exceptional Children*, 68, (8), 451-464.
- Ross, J. (1995). Strategies for enhancing teachers' beliefs in their effectiveness: Research on a school improvement hypothesis. *Teachers College Record*, 97, (2), 227-251. Retrieved June 24, 2004 from EBSCOhost database.
- Sage, D., & Burrello, L. (1994). *Leadership in Educational Reform: An administrator's guide to changes in special education*. Baltimore: Paul H. Brookes.
- Saphier, J., & King, M. (1985). Good seeds grow in strong cultures. *Educational Leadership*, 42, (6), 67-74.
- Schein, E. (1985). *Organizational culture and leadership*. San Francisco: Jossey-Bass, Inc.

- Senge, P. (1990). *The fifth discipline: The art and practice of the learning organization*. New York: Doubleday.
- Sergiovanni, T. (1992). *Moral leadership: Getting to the heart of school improvement*, San Francisco: Jossey-Bass.
- Sergiovanni, T. (1994). *Building community in schools*. San Francisco, CA: Josey-Bass, Inc.
- Sergiovanni, T. (1996). *Leadership for the schoolhouse*. San Francisco: Jossey-Bass.
- Skrtic, T. (1991). The special education paradox: equity as the way to excellence. *Harvard Education Review*, 61, (2), 148-206.
- Smith, A. (1997). Systemic education reform and school inclusion: A view from a Washington office window. *Education and Treatment of Children*, 20, (1), 7-20.
- Smylie, M. (1988) The enhancement of staff development: Organizational and psychological antecedents to individual teacher change. *American Educational Research Journal*, 25, (1), 1-30.
- SPSS ® (2003). *The Statistical Package for the Social Sciences (Version 12.0)* [Computer software]. Chicago: SPSS, Inc.
- Stainback, S., & Stainback, W. (1991). Promoting inclusive education: What happened to one school. *Quality outcomes-driven education*, 1, (3), 15-25.
- Stoll, L., & Fink, D. (1996). *Changing our schools*. Buckingham: Open University Press.
- Street, M., & Hoover, W. (2003). Compass, flashlight, and a helping hand. *Journal of Staff Development*, 24, (1), 44-47.
- Wagner, C., & Masden-Copias, P. (2002). An audit of the culture starts with two handy tools. *Journal of Staff Development*, 23, (3), 42-53.
- Wald, P., & Casslebury, M. (1999). *Realigning our schools: Building professional learning communities*. Washington, DC: Office of Special Education and Rehabilitative Services. (ERIC Document Reproduction Services No. ED 427478).
- Williams, A., Prestage, S., & Bedward, J. (2001). Individualism to collaboration: The significance of teacher culture to the induction of newly qualified teachers. *Journal of Education for Teaching*, 27, (3), 253-260.