EFFECT OF THE EXPEDITIONARY LEARNING MODEL ON ELEMENTARY AND MIDDLE SCHOOL TEACHERS' PERCEPTIONS OF SCHOOL OPERATIONS, STUDENT BACKGROUND, AND TEACHER EFFECTIVENESS LEVEL FACTORS

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Abstract

The purpose of this mixed quantitative and qualitative study was to determine the effect of the Expeditionary Learning (EL) model on the perception of the teachers on school operations, student background, and teacher effectiveness level factors in the elementary and middle schools in a rural to suburban Kansas City, Kansas public school district. Little research is available on the impact of implementing EL on teachers' perceptions of these factors.

Methodologies used to collect data for the study were both qualitative and quantitative. Qualitative data were collected through teacher interviews and open ended pencil/paper survey questions. The interview population sample was selected from the teacher population in each of three school based on teaching assignment. Interviews were recorded at the end of the first year of EL implementation. Responses to the interview questions were grouped according to like answers and similarities and differences noted. All teachers assigned to the three schools were invited to participate in the pencil/paper survey. Surveys were distributed at a faculty meeting and collected approximately one week later. Quantitative data were collected from responses to an online survey based on Robert Marzano's thirty-five years on how highly effective schools raise student achievement as presented in *What Works in School: Translating Research into Actions.*

Qualitative research from the interviews and pencil/paper survey indicated that EL practices were being implemented as action steps to many of the school operations, student background, and teacher effectiveness level factors. Quantitative research data were from the online survey *What Works in Schools* on teachers' perceptions at the school operations, student background, and teacher effectiveness level factors. ANOVA

tests on the indicated no statistical difference of interest in the context of this study between time, level factors, and the intersection between time and level factors.

Dedication

This clinical research study is dedicated to my family, without their help and support I would not have been able to accomplish this journey. My parents instilled in me, at a very young age, a belief that I could accomplish anything I dreamed of with hard work and perseverance. They will always be the wind beneath my wings. It is also dedicated to my husband, sons, and sister who encouraged and supported me every step of the journey.

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CHAPTER ONE

INTRODUCTION AND RATIONALE

Education reform is a time honored tradition in the United States, as politicians and educators seek ways to increase student achievement. Politicians at all levels of government have mandated education reform by calling for an increase in accountability for educators and schools. Accountability measures for schools are now linked to student achievement on mandated high stakes tests. The accountability movement of *No Child Left Behind* (NCLB) has many educators seeking ways to improve student achievement while maintaining the public's approval and moving from government involvement (Branch, 2005). Educators no longer have a choice, but rather an expectation to seek a school reform model that will guarantee progress toward increasing student achievement.

School reform models have been developed for the purpose of improving public education using a variety of methods to restructure the school environment. Comprehensive school reform focuses simultaneously on all elements of a school's environment and aligns them with a central, guiding vision for school improvement (Hertling, 2000). A variety of comprehensive school reform models have been developed for the purpose of determining the right ingredients needed to create an effective school, improving student achievement, and meeting NCLB targets. Comprehensive school reform focuses simultaneously on all elements of a school's environment and aligns them with a central, guiding vision for school improvement (Hertling, 2000). As a result of the need for a comprehensive school reform model, Expeditionary Learning (EL) was developed to improve school culture, increase student achievement, and provide professional development for teachers.

Educators of today must use research based programs to cope with the pressures of the age of accountability and continue to motivate student learning. Robert Marzano conducted a meta-analysis based on thirty-five years of educational research on effective schools. Marzano describes three sets of level factors relating to effective schools in *What Works in Schools: Translating Research into Action.* The three level factors include school operations (school-level factors), student background (student-level factors), and teacher effectiveness (teacher-level factors). School operations, student background, and teacher effectiveness level factors are broken down into eleven sub level factors. Sub level factors are identified as being critical to improving student learning and should also be included in the implementation of a school reform model.

Problem Statement

Effective education programs are imperative to increasing overall student academic achievement. Research on the effect of a school reform model on teachers' perception of school operations, student background, and teacher effectiveness level factors in the elementary school and middle school is limited. As educators seek reform models as improvement plans, it is important to know teachers perceptions of these level factors.

Background and Conceptual Framework

As the requirements of NCLB became a reality, a plethora of whole-school reform models inundated the education world. The new models were dedicated to improving student learning using a variety of methods to approach restructuring of schools. Educators and corporations looked for the best school reform models to produce an increase in student learning and achievement. In 1991 the New American Schools

Development Corporation (NAS) was created by a group of business leaders who "pledged to raise funds to support the research, design, implementation, and dissemination of ...'break the mold' schools to bring about educational reform throughout the country" (Ahearn, 1994). As a reaction to NAS's challenge, Expeditionary Learning Outward Bound (ELOB) developed Expeditionary Learning (EL) in 1992.

EL is a school wide K-12 research-based Project-Based Learning (PBL) model based on the educational thoughts and beliefs of Kurt Hahn, Outward Bound's originator (Ulichny, 2000). Using an outdoor education philosophy and best practice protocols, EL challenges teachers to teach in new and different ways and students to develop collaborative relationships with their communities.

EL staff considers professional development the major force behind comprehensive school improvement. Faculty members attend intensive professional development opportunities in curriculum, teaching strategies, and creating an effective school culture. Professional development takes place primarily in the school setting by EL instructors. Staff members may also have the opportunity to attend Outward Bound courses, summits, institutes, seminars and national conferences for additional professional development.

Students participate in broad multidisciplinary themed expeditions using teachers as guides to assist in finding information, evidence, and experience outside the classroom. The focus of investigation is a compelling topic to engage students in critical thinking, develop essential skills, and habits. Participation in fieldwork and service learning with character development during an expedition leads to the creation of an authentic project being presented to a real world audience.

Robert Marzano (2003), Senior Scholar at Mid-Continent Research for Education and Learning, synthesizes thirty-five years of research to provide direction for schools to become highly effective in raising student achievement in *What Works in School: Translating Research into Actions*. According to Marzano, the first phase in school improvement was a change in improved curriculum materials with the second period focus on the impact schools had on student achievement and the factors contributed to success. Even with the implementation of a wide variety of models and projects, school reform during the third phase failed to produce the desired results of increasing student achievement. Many of the reform models lacked an understanding about how a school acquires the necessary changes to be successful (Marzano, 2003). As educators began to understand how to acquire the necessary changes to improve student achievement a fourth phase referred to the new era emerged. The new era is based on the awareness that change is a highly contextualized phenomenon, distinguished by a heavy importance on data, and modifications are approached on a step-by-step basis (Marzano, 2003).

Significance of the Study

Past research studies on the EL model have shown positive correlation to student academic achievement (Evidence of Success Expeditionary Learning in Year Eight, 2001). EL schools are purported to promote a culture of best effort, high expectations, community and collaboration, service, and diversity. However, studies have not analyzed EL's effect on staff perceptions on school operations, student background, and teacher effectiveness level factors.

This study is significant because it attempts to establish if the EL model has an effect on the teachers' perceptions on school operations, student background, and teacher

effectiveness level factors. Considering the impactschool operations, student background, and teacher effectiveness level factors have on school improvement, results from this study would contribute to the body of professional literature and knowledge of the impact of EL, collaboration, collegiality, professional development, school reform and effective schools.

Purpose Statement

The purpose of this mixed quantitative and qualitative study was to determine the effect of the EL model on the perception of the teachers on school operations, student background, and teacher effectiveness level factors in the elementary and middle schools in a rural to suburban Kansas City, Kansas public school district. EL schools are purported to encourage a culture of supreme effort, high expectations, community and collaboration, service, diversity, and increase scores on state reading and math tests (Expeditionary Learning Schools, 2007).

Delimitations

Data are delimited to those obtained from two elementary schools and the middle school for students in grades K-8 in a mid sized rural to suburban Kansas City, Kansas public school district. Generalizations can be made only to population possessing similar demographics. Additional research is necessary with larger sample sizes to generalize the results to larger populations.

Assumptions

1. The assumptions made were that the responses given on interviews and surveys are honest, accurate, and valid measures of the teachers' perceptions

of the schools on school operations, teacher effectiveness and student background factors.

2. Teacher interview was appropriate to obtain participants perceptions on the implementation of EL on the culture of their school.
3. Survey instruments were appropriate to obtain participants' self-ratings of school operations, student background, and teacher effectiveness level factors.
4. Demographic composition of professional staff in the sample was assumed to be representative of all teachers in a rural to suburban Kansas City, Kansas public school district.

Research Questions

This study focused on elementary and middle school staff's perceptions of the implementation of Expeditionary Learning model on school operations, student background factors, and teacher effectiveness. More specifically, the study addressed the following research questions:

1. How do teachers perceive school operations level factors after one year of implementation of the Expeditionary Learning model?
2. How do teachers perceive student background level factors after one year of implementation of the Expeditionary Learning model?
3. How do teachers perceive teacher effectiveness level factors after one year of implementation of the Expeditionary Learning model?

Definition of Terms

A Nation at Risk: A document made public in 1983 by the National Commission on Education. *A Nation at Risk* was the beginning of more rigorous

standards and high-stakes testing to increase the nation's accountability for schools (Branch, 2005).

Accountability: Responsibility for student performance by exhibiting results (via test scores, academic progress in class performance). Information from assessments will help educators and state officials identify educational problems at the school level and ultimately improve academic performance for all students (Branch, 2005).

Accountability Movement: Movement started with *No Child Left Behind Act* and culminates with numerous reforms designed to improve public education (Hunt, 2007).

Elementary and Secondary Education Act (ESEA): In 1965, the federal government set in motion the first elementary-secondary education proposal by passing the Elementary and Secondary Act (ESEA). The primary focus of the ESEA is to improve the educational opportunity for economically disadvantaged students through special funding, Title I (Branch, 2005).

Expeditionary Learning Model (EL): A project based learning design based on Outward Bound (OB), an educational program based adventure and service recognized for its wilderness expeditions (Thomas, 2000).

Expeditions: Intellectual investigation journeys into the unknown built around significant projects and performances in which teachers act as guides and students investigate questions of substance and value, combining intellectual inquiry, character development, and community building while developing their interest, talents, understanding, and courage (Dawson, 1996; Thomas, 2000).

Interdisciplinary: A knowledge view and curriculum method using methodology and language from one or more disciplines to study a central them, issue, problem, topic, or experience (Dawson, 1996).

What Works in Schools Online Survey: The online survey consisting of 68 items allowing teachers and administrators to offer their insight about the accomplishments of their school or district and pinpoints the areas that are most likely in need of being addressed to boost student achievement (Marzano, 2003).

No Child Left Behind (NCLB): Educational reform approved by President George W. Bush's Administration in 2002. The act calls for more accountability for student achievement and elevated academic standards (Branch, 2005).

Professional Development: Continuing the advancement of skills, knowledge, and ideals through purposeful learning efforts to facilitate individuals to perform more competently in their professional positions, support their organization's mission, and be a factor in the progress of the career (McLagan, 1987).

Project-based learning (PBL): A learning model organizing around complex projects centered on stimulating questions or problems, linking students in design, problem-solving, decision making, or investigative activities; give students the chance to work relatively separately over long periods of time; and ending with realistic products or presentations (Thomas, 2000).

School-level factors (school operations): Five level factors which are under the authority of the school as a whole. Changes in these factors are typically an outcome of formal or informal policy decisions. The five factors are (a) guaranteed and viable curriculum, (b) challenging goals and effective feedback, (c) parent and community

involvement, (d) safe and orderly environment, and (e) collegiality and professionalism (Marzano, 2003).

School culture: A shared viewpoint, philosophy, values, outlook, theories, expectations, and attitudes. When organizational members communicate with one another, they speak a common language, use similar terminology and observe similar rituals and ceremonies (Quiambao, 2004).

School Reform: A common term about various efforts to improve school and student achievements. Reform efforts bring together all aspects of education, from how schools are managed to curriculum taught in the classroom (Branch, 2005).

Standards: Course benchmarks used to gauge students' academic achievement, curriculum to steer what students study in the classroom (Branch, 2005).

Student academic achievements: Student knowledge and mastery of curriculum standards measured by state reading and math assessments (Marzano, 2003).

Student-Level Factors (student background): Three level factors used to measure student background are (a) home environment, (b) learned intelligence and background knowledge, and (c) student motivation (Marzano, 2003).

Teacher-Level Factors (teacher effectiveness): Three level factors that are primarily a function of decisions by individual teachers and have more impact on student achievement than any other single factor are (a) instructional strategies, (b) classroom management, and (c) classroom curriculum design (Marzano, 2003).

Overview Methodology

This mixed quantitative and qualitative study was designed to determine whether the EL model changes perceptions of teachers on school operations (school-level factors),

teacher effectiveness (teacher-level factors), and student background (student-level factors) in two elementary schools and a middle school population of approximately 1600 students and 110 teachers located in the rural to suburban Kansas City, Kansas public school district.

Qualitative data was obtained from individual teacher interviews and a pencil/paper survey with open-ended questions. *What Works in Schools: Translating Research into Action (WWIS)* 2005 and 2008 online surveys data were used to quantified this study. Once quantified, the results were tested to determine if a significant difference existed between the two years. The mixed qualitative and quantitative research method was appropriately chosen for this study. Using a qualitative research method for the study provided an in-depth teacher perspective which would not have been known from quantitative data. Quantitative data supported the qualitative research and provided credibility for the study.

Summary/Organization of the Study

Introduction to the problem statement and design components including background, significance, purpose statement, delimitations, assumptions, research questions, definition of terms, and overview of research methods information were included in Chapter One. Relevant review of literature regarding the problem in this study is presented a Chapter Two. Chapter Three contains the presentation of methodology and procedures used for data collection and analysis. Description and analysis of the data are explained in Chapter Four. Summaries and findings are discussed along with the supposition for practice, conclusions, and suggestions for future research in Chapter Five.

CHAPTER TWO

REVIEW OF LITERATURE

Introduction

The review of literature for this study contains information on education reform in the United States, the Expeditionary Learning model, and the Effective Schools movement. Education reform in the United States is for the expressed purpose of changing schools to meet the need of students and increasing academic achievement. Educators continually seek ways to reform schools to meet the needs of students and comply with government regulations. Expeditionary Learning (EL) is a project based comprehensive school reform model that was developed out of the Outward Bound outdoor education philosophy. The Effective Schools movement shaped the characteristics of successful schools. Educators develop improvement plans by identifying best practices to increase student achievement in low functioning schools based on the Effective School movement.

Education Reform

Education reform movements were developed for the purpose of changing schools to accomplish specific goals to meet the needs of students at various times in history. Warren, (as cited in Graham, 2002), defined education reform in the United States as "the effort to make schools more successful in enhancing student's attainment of academic subject material." As society's values and needs have changed, so have the beliefs about what and how students should be taught in the United States schools. Public cries for policy makers to mandate changes in public schools to solve a variety of society's problems that in turn have driven the need for educational reform. To achieve the

American dream, the idea that students need to have the best educational opportunity possible is deeply embedded in the culture of the United States.

Several prevailing forces have driven the need for school reform in the United States. One of the two powerful forces compelling school reform movements includes the mandate for more and better schooling for all citizens of the United States and the need for economic maintenance for future generations to continue enjoying a high standard of living (Stringfield, 1996). Parents, educators, and politicians fear if schools do not change, the hope of future generations to maintain or increase the standard of living of their parents will vanish. Also used as the reason for school reform is the deeply embedded belief that individuals should be held personally responsible for their educational accomplishments (Reese, 2007).

Changes over time have altered the public school system into becoming multipurpose institutions that shoulder the responsibility of educating and caring for children in the United States. School reform movements often begin with changes in society, which in turn have created new demands on what should be required of students to be successful individuals. Social groups in the United States have in the past demanded public schools to address the weaknesses of families, churches and the workplace by crying for reform measures to solve societal problems (Reese, 2007). In order to meet the demands of society calling for schools to play a significant role in addressing the increasing needs of the students, unrealistic expectations have been placed on the educational system.

Results from past reform movements have led to more students staying in school longer, better facilities, and better-trained teachers who have additional available

resources to facilitate more effective student learning (Kennedy, 2007). Even with many past school reform movements, educators persevere in asking questions on the future of public school systems. Educators continue to ask the recurring question and attempt to resolve the issue of whether public schools can offer comparable educational opportunity and be exceptional at the same time (Parker, 1994). Without quality public schools, all children will not have an opportunity to experience and acquire an education that will make them competitive in the world market for employment. Over the past two centuries, public schools in the United States have assumed many additional responsibilities besides educating the young that have led to the educational system inevitably disappointing many people (Reese, 2007). Schools no longer provide just an education for children, but are responsible for providing a variety of services to help students grow emotionally, physically, and mentally.

History of Education Reform in the United States

Public expectations for the students in schools in the United States during the twentieth and twenty-first centuries can be divided into four distinct time periods. The first period is from the turn of the twentieth century to approximately 1925. The Carnegie Foundation initiated criticism of the United States public education system in the past one hundred years with a massive effort to advance K-12 education (Marzano, 2003). Andrew Carnegie initiated the Carnegie Foundation in 1905 for the primary purpose of researching and writing about educational issues. Reports on the findings of the Carnegie Foundation have been published on every level of education (Carnegie Foundation, 2007). Along with publishing articles on educational issues, the Carnegie Foundation

primarily brought changes to the teaching profession and standardizing high school courses for admission into institutions of higher learning.

During the first period the primary emphasis of education reform was to help assimilate and develop fluency in the English language in the large immigrant population who had recently arrived in the United States (Graham, 2002). Once the immigrant population had been assimilated into the United States culture, the role of education changed to meet the needs of the next generation. Educators began to focus on helping children become part of the working world once their formal schooling was finished.

A second period began in 1926 and lasted until 1954 with a focus on schools helping children to "adjust to life" by placing students in "tracks" to prepare them for life after public education (Graham, 2002). Children from particular ethnic and socioeconomic groups were often placed into different "tracks" to prepare them for the working world maintaining the status quo.

Period three, 1954 to 1983, is when schools were expected to provide access to institutions, settings, and opportunities to students that had been previously denied (Graham, 2002). The most profound criticisms and reform efforts came with the launching of Sputnik on October 5, 1957. The launching of Sputnik was the historical event that began the questioning of the quality of the United States public school systems (Marzano, 2003; Parker, 1994). In response to the negative comments and questioning of the quality of public schooling, government agencies began to react to the cry for educational reform. Suddenly large amounts of money were made available from institutions wanting to help educators make changes in schools to improve student learning. Government sponsored summer institutes were organized to help teachers learn

new curriculum and how to use textbooks. Public education was viewed in a negative light, due to perceived diminishing thinking skills of students that were believed to be a direct link to national security and the quality of schooling (Marzano, 2003). To enter the "space race" and with the "Cold War," schools were expected to develop a more demanding curriculum with rigor and viability.

The 1950s and early 1960s were also are marked with struggles against poverty, racial, and unequal educational opportunity. As the Civil Rights movement began sweeping across the nation, all students regardless of their race, religion, ethnic group, and socioeconomic background began to have the same advantage as any other groups. Not only was there a demand to provide a quality education for students of all races, religions, economic backgrounds, or ethnic groups, but also the rights of special needs students became part of the education community. Students who had once been denied access to public schools because of physical or mental disabilities were now being educated in the neighborhood attendance centers in regular classrooms. Many combined efforts to address the problems of inequality were centered on the educational world. Segregated schools became integrated in an effort to equalize the education opportunity for students living in urban areas. President John F. Kennedy created a task force on Education and Poverty due to a national concern for the urban poor as portrayed in M. Harrington's book *The Other American: Poverty in the U.S* (Parker, 1994). Continuing the effort of providing additional funding for school districts on the basis of families living below the poverty line, President Lyndon Johnson initiated the Great Society education programs and the Elementary and Secondary Education Act, 1965 (ESEA 1965) (Parker, 1994).

During the 1960s the United States Congress ordered the commissioner of education to survey the educational opportunities for minority students. A belief that great disparities in the quality of education between black and white students led to the largest survey of public education that has ever been undertaken entitled *Equality of Educational Opportunity.* James Coleman led the team of researchers conducting the survey, to fulfill the requirements set forth by the United States Congress as part of the Civil Rights Act of 1964, which became commonly referred to as the "Coleman Report" (Marzano, 2001). Publicized findings from the *Equality of Educational Opportunity* report acknowledged that schools are responsible for only about ten percent of the difference in student achievement and the other 90 percent was due to the individuality in student backgrounds (Marzano, 2001). Two major effects on the perceptions of education in the United States came from the *Equality of Educational Opportunity* survey. Findings from the survey revealed that schools could not be seen as a realistic vehicle in equalizing the inconsistencies in students' academic achievement due to environmental factors. A second finding from the study generated the belief that the differences in schools had no relationship to student achievement.

The fourth period of education reform began in the 1980s with social and economic pressures created a surge of reform that is still being felt by public school systems today. One concern expressed was the fear that the United States was losing world economic superiority because of the "rising tide of mediocrity" in education (Parker, 1994). The *National Commission of Excellence in Education: A Nation at Risk* was published in 1983. Many newspapers and magazines across the nation published the complete text of the report for everyone to read and brought about public awareness of

the education crisis in the United States. A systemic approach to education reform in the United States materialized from findings in the report. Information from the report was used to determine what should or could be done to renovate public school systems across the nation.

Commonly known as *A Nation at Risk*, the report used comparative assessment data from 19 international tests from 21 countries, declared "Our nation is at risk," and called the for new school reform programs (Parker, 1994). The report outlined the poor circumstances within the K-12 setting, from low basic comprehension rates to high dropout rates. Data from the report revealed that 13 % of all United States' 17 year olds and almost 40 % of minority students were found to be functionally illiterate (Parker, 1994). Included in the *Nation at Risk* report was a call for educational reform to raise the number of requirements for students to graduate from high school and mandatory competency tests for preservice teachers. After the results of the report were published, politicians and the public began pointing fingers at who was to blame for the failing scores. Blame for the failing test scores was placed on the schools and teacher education preservice programs (Watras, 2001). *A Nation at Risk* became the catchphrase for administrators and policy makers that ushered in what was to become the latest wave of education reform.

The most recent school reform movements have taken on the role of assessing students' knowledge on high-stakes tests in an effort to hold teachers and administrators accountable for educating youths in the United States. Federal and state legislators have become involved in mandating assessments of student knowledge on high-stakes tests to

hold educators responsible for providing quality education for children in the United States.

The standards movement began in the 1990s and was intended to improve student learning, but has been overshadowed by the accountability movement. Two important federal education acts were passed in 1994. *Goals 2000: Educate America Act* was passed on March 31, 1994 (Paris, 1994) and Improving America's Schools Act of 1994 (IASA) was passed (Jorgensen, 2003). Along with IASA was the reauthorization of the Elementary and Secondary Education Act (ESEA) of 1965, which allowed ESEA to focus on schools, meeting the needs of all students, not just the disadvantaged or at risk children (Jorgensen, 2003). The United States government was becoming more involved in determining the quality education provided for children across the nation and holding states accountable for assessing student learning.

Goals 2000: Educate America Act was enacted for the purpose of establishing national education goals for public elementary and secondary schools. The federal government promised to form a new and valuable partnership with states and communities to improve student academic achievement across the nation. Even with the new joint venture with the federal government, states were to remain responsible for providing the education of students while giving control to local school boards (Goals 2000: Educate America Act, 2008). The *Goals 2000* act only provided a "framework" for all local school reform efforts and all federal K-12 programs. Included in the *Goals 2000 Act* were eight national education goals to be achieved by the year 2000 which called for all participating states:

> "to improve learning and teaching by providing a national framework for education reform; to promote the research, consensus building, and systemic changes needed to ensure equitable educational opportunities and high levels of educational achievement for all students; to provide a framework for reauthorization of all Federal education programs; to promote the development and adoption of a voluntary national system of skill standards and certifications" (Goals 2000: Educate America Act, p.1, 2008).

Five years grants for were made available to help states and communities develop and implement *Goals 2000* with a focus on reform and raising student achievement.

Improving America's Schools Act of 1994 (IASA) and the reauthorized Elementary and Secondary Education Act were intended to work together with *Goals 2000: Educate America Act,* in support of state and local efforts in setting challenging content and performance standards to carry out school reform efforts (Jorgensen, 2003). The guiding themes included in the 1994 ESEA were high standards for all children; a focus on teaching and learning; partnerships among families, communities, and schools; flexibility together with responsibility for student performance; and providing resources to areas of greatest needs (Jorgensen, 2003). ESEA provided states with more flexibility in designing and operating federally-funded education programs. IASA also supplied added support and the School-to-Work Opportunities Act to help build supplementary conduits to enable all students to meet demanding state standards (Kasper, 2004).

The reauthorization of ESEA on January 8, 2002 increased the federal government's role in education by raising the goal of student learning, demanding the closing of the achievement gaps, and ensuring that in every classroom children are being

taught by a highly qualified teacher. This landmark event soon became known as the No Child Left Behind Act of 2001 (NCLB). Significant changes to the education landscape transpired with the passage of NCLB; a new era of accountability began with local control, parental involvement, and funding became the foundation of the nation's educational system (Jorgensen, 2003; Wenning, 2000). At the heart of the NCLB Act are several measures intended to produce significant improvements in achievement scores and to make states and schools more accountable for increasing student learning. Paige (as cited by Jorgensen, 2003) stated the focus of NCLB "is to see every child in America—regardless of ethnicity, income, or background—achieve high standards." Schools must guarantee that all students learn the basic skills and knowledge identified in state grade-level standards and benchmarks (Jorgensen, 2003). The age of accountability and high stakes testing was born with the passage of NCLB.

The question now becomes who should be held accountable. Should schools hold students accountable by adding more courses to graduation requirements, more assessments based on rigorous curriculum, and enforce sanctions for those not proficient? School reform must start with changing those in the education profession by providing professional development to transform how the business of schooling is done. Professional development must cultivate important examinations into teaching practices and student learning by developing habits and cultures within the school community. The organizational structures of professional development in a school must be created to actively promote learning and collaboration about the practice of teaching. (Darling-Hammond, 1995). Perhaps both types of changes in professional development and student accountability must occur simultaneously for true school reform to take place.

Recent studies on the history of educational reform during the twentieth century suggests that many changes made in school practices were ill-conceived from the beginning and therefore met with failure to accomplish their intent. Many education reforms have failed and others were successful in having an impact on school practices (Tyack & Cuban, 1995). Whether deemed a success or failure, all reform movements were susceptible to criticism by the public in the United States. Many citizens criticize the past as not fulfilling the needs of students, while others resist new reform movements.

Education reform is deeply embedded in the culture of the United States in the desire to educate the youth to be responsible citizens and make choices in elected officials. Embedded in education reform is the need for future generations to maintain equal or better lifestyle by holding individuals responsible for their own learning. To insure that all children receive a quality education, a variety of historical events have led to both the federal and state elected officials mandating changes in how students are educated.

Expeditionary Learning

EL is a comprehensive K-12 educational reform model built upon the educational ideas and insights of Outward Bound's originator, Kurt Hahn, was designed to employ the passion to learn (Stringfield et al., 1996; Expeditionary Learning, 2007). Expeditionary Learning schools include both a change in how students are taught and held accountable for their learning and providing professional development for educators. Students are pushed to meet high levels of academic achievement and grow through character development by generating authentic products that are presented to authentic audiences.

Educators have the opportunities to attend both on and off site professional development experiences to develop best practices to use in the classroom.

Moving the Outward Bound model from the wilderness environment into an urban classroom setting required the collaboration of outdoor and K-12 classroom educators. In 1992 Outward Bound USA collaborated with Harvard University to create a "break-the-mold" design to be implemented over a five-year period of time (McKiernan, 1995; Rugen & Hartl, 1994). Chosen as one of nine projects endorsed and funded by the New American Schools Development Corporation, EL was designed "to create an unconventional school on a conventional budget" (McKiernan, 1995). Changing a conventional school on a conventional budget to an EL model often time means increasing student and staff expectations and making structural changes to daily operations of the school community.

The EL model places the same emphasis on academic knowledge as it does on character development through a variety of activities. Students in an EL school are held to high achievement expectations, superior quality of work, and require rigorous demonstrations of competencies (Stringfield et al., 1996). To accommodate the changes in academic expectations for students and staff, structuring the school day must also be altered to meet the requirements of the EL model. Schools following the EL model undergo a complete reorganization of time, space, and develop relationships among people across disciplines with learning technology and community (Stringfield et al., 1996).

The objective of EL is to succeed in creating a learning environment resembling a wilderness expedition into the unknown. EL utilizes personal experience and intellectual

growth to promote self-discovery and knowledge (McKiernan, 1995). Students in EL schools are provided with learning opportunities that are designed both cognitively and structurally appropriate for their age and educational experience. A focus on student and teacher learning is based on the 10 design principles and five core practices of the EL model. The 10 design principles and five core practices are intended to transform the whole school and improve student learning.

In the EL model, students are expected to be highly involved in designing their own learning, determining how to gain knowledge of the information, and assessing their progress (McKiernan, 1995). The heart of EL model lies in the use of expeditions that guide students through new learning journey of inquiry, discovery, and action that generally last six to nine weeks. Expeditions are how the core of the curriculum is delivered to the students through the use of a variety of best practice protocols. Each expedition contains several projects and performances, often utilizes an expert guide, and incorporates fieldwork to engage students in real-world investigations (Stringfield et al., 1996). Students are organized into structured groups where they spend a large part of the school day involved in an in-depth investigation of a single theme or topic created for a particular purpose. Students are many times involved in designing the expeditions that include an academic, service, and physical component. Teachers and students develop goals for the expeditions together with clear consequences and rewards for successes in learning. Learning from a variety of experiences both on and off the school site is always at the heart of an EL school.

History of Expeditionary Learning Schools

The history of EL model is rooted in Kurt Hahn's Outward Bound program's 60-year history in outdoor education. Hahn's inspiration for the first Outward Bound program came in 1941 in the middle of turbulent waters of the North Sea during World War II (Outward Bound, 2009). At the request Holt, Hahn developed Outward Bound to provide young sailors with the experiences and skills necessary to survive at sea. The older sailors had learned practical skills while experiencing difficult situations; the young seamen were lacking skills and confidence to survive demanding conditions. Experienced sailors had been brought up during the age of sailing that provided them with the confidence and ability to cope with demanding challenges (Outward Bound, 2009). The Outward Bound experiment generated the development of over 40 schools around the world and also helped to cultivate the outdoor or adventure education industry (Outward Bound, 2009).

In 1962, forty years after Hahn started Outward Bound, private school leaders, Joshua Miner and Charles Froelicher, brought Outward Bound to the United States (Stringfield et al., 1996; Expeditionary Learning, 2008). Throughout the 1960s and 1970s, Outward Bound programs were involved in outreach programs in both public and private schools (Expeditionary Learning, 2008). Outward Bound helped create and support many organizations using adventure, service, and other forms of engaging opportunities to teach and motivate people to do more than they thought possible.

Seeing the need to incorporate the outdoor experience into urban areas, Outward Bound began developing centers for children in large cities in the United States. In 1987 New York City Outward Bound founded the first independent urban Outward Bound

Center in the United States (New York Outward Bound, 2008). Other urban centers began opening in larger cities on the east coast of the United States after seeing the success of the centers in New York. The new centers grew out of an interest in making the wilderness experience of Outward Bound available to urban youth and associated outreach efforts in the 1970s and 1980s. Outward Bound began establishing centers focused on providing better recruitment, preparation, and follow-up with urban youth participating in Outward Bound wilderness courses in Boston, Atlanta, and Baltimore (Expeditionary Learning History, 2008). Several of the urban centers developed effective programs in public schools, bringing the teaching practices of Outward Bound, along with the spirit of adventure and service, to schools and other urban institutions (Expeditionary Learning, 2008). Moving the outdoor experience to the school classroom began the movement to create a new school reform model.

A national urban education initiative began in the 1990s when Outward Bound began to build on their work and identified, developed, and replicated effective models of urban and school-based programs (Expeditionary Learning, 2008). In addition to Hahn's ideas, EL leaders used other educational thinkers in developing the model including John Dewey, Paul Ylvisaker, Harold Howe, Ted Sizer, Eleanor Duckworth, Howard Gardner, Debbie Meier, and Tom James (Expeditionary Learning Schools, 2008). Taking all of the best ideas of the different educational thinkers EL began developing a new school reform model geared toward the urban youth in the United States.

The EL initiative focused on whole-school improvement and the professional development of teachers. In 1992 the Outward Bound's Expeditionary Learning proposal was selected by the New American Schools Development Corporation (NASDC) for a

five-year grant (Expeditionary Learning History, 2008). NASDC's grants and other financial support permitted Outward Bound to develop and test the EL design model. As soon as the EL design model appeared to be successful, additional support was provided to include more schools (Expeditionary Learning, 2008). NASDC, known as the New American Schools (NAS), helped EL move from depending on financial philanthropy support to being reliant on fees paid by the schools and districts for service provided to implement the model (Expeditionary Learning, 2008). Funding for many schools is reliant on grants used to cover the cost of implementation of the EL model.

The 1993-1994 school year began with 10 schools in five cities: New York, Boston, Denver, Dubuque, and Portland, Maine using the Expeditionary Learning model. Twelve years later, nine of the original 10 schools remained as active partner schools in the EL national network (Expeditionary Learning, 2008). Expeditionary Learning Schools continued to grow across the nation with new schools coming on board each year and can be found in urban, rural and suburban settings in 29 states and the District of Columbia. As of 2008, EL is working with approximately 160 schools with 50,000 students and 5,000 teachers throughout the United States. There are 112 urban and rural communities that have a high percentage of students qualifying for the federal free and reduced-cost lunch program according to EL Schools report (Expeditionary Learning, 2008).

Philosophy of Expeditionary Learning Schools

Expeditionary Learning (EL) philosophy is not aligned with any one particular theoretical framework (Sharpswain, 2005). Not wanting to be pigeon-holed in a particular area, followers of EL describe the model as an educational initiative that

exemplifies the uses of best teaching practices. The best teaching practices identified by EL lead to powerful learning, and help teachers apply strategies in their classrooms (Sharpswain, 2005).

The influence of Kurt Hahn and the constructivist learning theory are two major contributors that continue to shape the EL philosophy (Sharpswain, 2005). These influences and philosophy are combined to guide students in the development of academics, service, adventure, and character. Three important components developed to reflect the philosophy and guide the implementation of EL in a school are the Ten Design Principles, the core Practices and Benchmarks, and professional development programs.

The philosophy and rituals of Expeditionary Learning Schools are derived from the original Outward Bound wilderness schools. Hahn believed his mission in life was to help people around the world to realize the truth about themselves. "There is more in you than you think" became Hahn's motto for the schools he started and the underpinnings of the philosophy of Outward Bound and later the EL school model (Hahn, 2008). Hahn's philosophy is based on the belief that each person has more courage, more strength, and more compassion than they perceive which is used to facilitate personal transformation by challenging and helping people accomplish more than they believe is possible, (Hahn, 2008; Expeditionary Learning, 2008). Hahn believed it was the educator's responsibility to impel and to support the student and help each child to reach his/her potential (Outward Bound, 2008). Character development and teamwork are embedded in school structures and teaching practices and rituals such as community meetings are incorporated into the daily schedule. Rituals and customs are practices carried out on a regular basis that build community and the ability to focus on learning, leadership and

service. Facilitating the movement from one activity to the next, rituals and customs are also used in school-wide gatherings to express identity and vision.

By transforming schools into the EL model, focus is placed on the whole school rather than on individual teachers or exceptional principals by working with faculties to concentrate on teaching and learning, rather than on governance issues (Stringfield et al., 1996). Three anticipated changes in a school after adopting the EL model include:

1. Students' learning and character development are both ranked at the top of what the school values.
2. Schools reorganizing time, space, and relationships among persons and learning technology, and between the school and community maximize learning opportunities.
3. At critical transition points in their schooling, students must be held to high expectations and demonstrate proficiency in character development and academic achievement (Weinbaum et al., p. 6, 1996).

Providing schools with a vision and direction, the EL model draws its philosophy and strength from the 10 principles and five core practices. The 10 principles and five core practices are the foundations that are incorporated into all endeavors from expeditions and school schedules to faculty institutes (Stringfield et al., 1996). Students, teachers, and administrators work together to create a school culture of high expectations and respect by placing a focus on the 10 design principles and five core practices. EL's Ten Design principles are:

1. The primacy of self-discovery

2. The having of wonderful ideas
3. The responsibility for learning
4. Empathy and caring
5. Success and failure
6. Collaboration and competition
7. Diversity and inclusion
8. The natural world
9. Solitude and reflection
10. Service and compassion (Expeditionary Learning, p.1, 2008)

EL learning practices are described in the Core Practice Benchmarks. Five core practices provide an overview and guide teachers, students, administrators, families, and other partners in the implementation of the EL model. The five core practices work together to promote high academic achievement through active learning, character growth, and teamwork. Core Practice Benchmarks include learning expeditions, active pedagogy, school culture and character, leadership and school improvement, and structures (Expeditionary Learning Schools Core Practice Benchmarks, 2008). Also incorporated in the Core Practices is a planning guide for school leaders and teachers to use as a framework for designing professional development and as tool for evaluating implementation of the EL model.

The first Core Practice is learning expeditions that provide educators with guidelines for creating long-term, multidisciplinary projects. Expeditions combine academic, service, physical activities, fieldwork, and community experts into an authentic project for a real world audience. Reflection and critique core practice involves teachers

working collaborative with colleagues to examine lessons plans and students' work. School culture benchmark stresses community and collaboration, placing high expectations for all students, including service components, and providing diversity in learning. School structure is creating a way for collaboration in decision making between teachers and administrators. A school structure should be designed to facilitate the building of relationships between staff, students, parents, and the community. The last core practice is school review, which is the assessment of student performance and monitoring the implementation of the EL benchmarks (American Institutes for Research, 1999). School review serves as an assessment of the progress made toward the implementation process as well as providing a guide for setting goals for the next school year.

A second philosophy influencing the Expeditionary Learning Schools is the constructivist learning theory. The constructivist learning theory is based on observation and scientific study on the nature of knowledge and how people learn (Hein, 1991). New research in cognitive and developmental psychology in the late 1980's supported the constructivist learning theory (Hein, 1991). Researchers began to build an understanding of the best way for acquiring knowledge and learning. Constructivism hypothesizes that knowledge does not exist outside of one's mind, but is constructed by individuals built upon experiences (Yilmaz, 2008). By actively constructing a part of ones own learning, knowledge is not passively assimilated from a person's surroundings or from someone else's understanding. Knowledge is individuals or groups constructed by who make sense of their own particular understanding of things in their world (Yilmaz, 2008). Students

build knowledge by actively participating in the learning process from planning to the completion of the final product.

In the educational world, the constructivist view of learning can lead to numerous and diverse teaching practices. The constructivist view meaningful learning as an active process of knowledge building. Learning is impacted by connections with prior knowledge with an understanding of new events and ideas. An ever-changing activity, learning also involves put together theoretical structures and self-control through reflection and abstraction (Yilmaz, 2008). Learning is successful when students can exhibit conceptual knowledge in an application of ideas.

In a constructivist classroom, the teacher uses the students' knowledge of a concept and then builds learning opportunities where ideas can be refined or revised through a variety of experiences. Both EL model and Constructivist Theory view learning as an act of discovery and believe that experience is the most powerful teacher (Expeditionary Learning, 2008). Experiences might include questioning, presentation of new information, research opportunities, or encouraging challenging current beliefs. EL and the Constructivist theory are based on particular ideas about what is important for a person to learn and practice as a foundation for academic and life-long success. Five guiding principles found in a constructivist classroom are:

1. Posing Problems of Emerging Relevance to Students.
2. Structuring Learning Around Primary Concepts: The Quest for Essence.
3. Seeking and Valuing Student' Points of View.
4. Adapting Curriculum to Address Students' Suppositions.
5. Assessing Student Learning in the Context of Teaching (Brooks, 1999, p.33).

Research Related to Expeditionary Learning

Expeditionary Learning has participated in research since being selected by the New American Schools in 1992. Key independent research for EL is compiled into one publication entitled *Evidence of Success Expeditionary Learning in Year Eight* published by EL. This publication contains third-party research on EL that is available. Research has been conducted by independent researchers and organizations to investigate the implementation and effectiveness of the design. Independent studies have been conducted by the American Institutes for Research, Academy of Educational Development, the National Staff Development Council, the RAND Corporation, the University of Colorado, the Center for Research in Educational Policy, and the Fourth-year Achievement Results on the Tennessee Valued-Added Assessment System. Small third-party studies of schools that have successfully implemented the EL model have also been conducted (Evidence of Success Expeditionary Learning in Year Eight, 2001).

In 1994 the University of Colorado conducted an assessment of the initial phase of the Outward Bound implementation of the urban education initiative that was a precursor to Expeditionary Learning Outward Bound. Findings in the report revealed that early EL implementation appeared to have a noticeable effect on students' attitudes about school, showed teachers new and innovative practices, and provided administrators with an opportunity to network with colleagues (Evidence of Success Expeditionary Learning in Year Eight, 2001).

The American Institute for Research assessed the success of twenty-four school-wide reform models including the EL model. Using the research data, the twenty-four models were rated on two criteria: evidence of positive effects on student achievement

and support provided by the developer. EL was rated as having particular strength for professional development support (Expeditionary Learning Schools, 2008). Evaluators ascertained that EL was one of only eight school-wide reform models shown to have positive effects on student achievement.

A three–year qualitative and quantitative evaluation of EL was conducted by the Academy for Educational Development. The study found that EL schools had developed a strong sense of mission and purpose and transformed curriculum, instruction, and assessment in the classroom. Significant results in six areas were found including curriculum, instruction and assessment, student work and achievement, student engagement and motivation, school organization, professional development, and parent and community involvement (Evidence of Success Expeditionary Learning in Year Eight, 2001).

National Staff Development Council (NSDC) reported on a comprehensive two-year study for staff development programs (Evidence of Success Expeditionary Learning in Year Eight, 2001). *What Works in the Middle: Results-Based Staff Development* the researcher found schools that implemented the EL model met all twenty-seven of the NSDC standards for quality staff development. The study found that the EL model created a link between teacher learning and student learning. As a staff development program, EL met the following standards specifically;

1. Requires and fosters a norm of continuous improvement,
2. Requires study of the change process,
3. Provides a framework for integrating innovations and relating those innovations to the mission of the organization,

4. Increases administrator and teacher understanding of how to provide school environments and instruction that are responsive to the developmental needs of adolescents,
5. Prepares teachers to use various types of performance assessment (Evidence of Success Expeditionary Learning in Year Eight, 2001, p. 12).

A study for New American Schools was prepared by the RAND Corporation in 1997 to assess the ability of each of the design team implementations from 1995 to 1997. Included in the study were six Expeditionary Learning schools that were found to be one of the two most successful designs implementations (Evidence of Success Expeditionary Learning in Year Eight, 2001). Five core elements of school transformation were used to assess the extent of implementation including curriculum, instruction, assessment, student grouping, and professional development (Evidence of Success Expeditionary Learning in Year Eight, 2001). EL schools were shown to be successful in implementing the model in five out of the six schools, which were the highest rate of success among the seven design teams, and one of two designs to reach the fulfilling stage. The five design team characteristics used to identify effective implementations are:

1. Stable teams with the potential to grow and the ability to provide qualified personnel to serve schools.
2. Good initial selling to schools and the capability to convey their model well.
3. Effective initial advertising to the district and the capability to acquire the resource support required to successfully implement the model.
4. Importance given to the core elements of school transformation: curriculum, instruction, assessment, student grouping, and professional development.

5. Resources for implementation including whole-school training, facilitators, and common planning time (Evidence of Success Expeditionary Learning in Year Eight, 2001, p. 30).

Using the five factors related to successful implementation, EL ranks strong on four out of five, and rated strong in more than two characteristics of effective design teams. Of all the schools studied, EL was the only design team found to have a clear focus on the five core elements (Evidence of Success Expeditionary Learning in Year Eight, 2001). A particular strength was found in focusing on the change process in schools around the core elements of school improvement: curriculum, instruction, assessment, student grouping, and professional development.

In 1997 the Center for Research in Educational Policy at the University of Memphis conducted a study of thirty-four Memphis City Schools. Three of the thirty-four schools evaluated had implemented the EL model during the summer of 1995. Using data from interviews with principals, teacher focus groups, teacher surveys, and classroom observations, the study revealed that the three schools had made important changes in curriculum, instruction, assessment, and organization (Evidence of Success Expeditionary Learning in Year Eight, 2001). Fourth-year achievement results on the Tennessee valued-added assessment system for restructuring schools in Memphis was conducted in 2000 (Evidence of Success Expeditionary Learning in Year Eight, 2001). This study focused on the overall effect of the eight school reform designs implemented in the Memphis City Schools. Schools that adopted a reform design demonstrated an increase in achievement from year to year after the initial implementation of the model. In the year before and after implementation, all restructured schools made smaller

achievement gains compared to the non-restructured schools. During the second year of implementation, schools began to show higher achievement gains compared to non-restructured schools. Restructured schools improved in all subject areas including math reading, science, language and social studies by the second and third year of design implementation (Evidence of Success Expeditionary Learning in Year Eight, 2001). Data revealed that all of the schools implementing reform designs demonstrated noticeable gains in academic achievement.

Educators continually seek ways to reform schools to meet the needs of students and comply with government regulations. The K-12 school reform model, Expeditionary Learning, is based on the philosophy and beliefs of the European based Outward Bound outdoor experience schools. A limited amount of research has been conducted on the implementation of Expeditionary Learning school reform model in the United States.

Effective Schools

The effective schools model was first developed by Ronald Edmonds in the 1970s and shaped the five characteristics of successful schools. Edmonds (1986) defined an "effective school" as a school "where the proportion of low-income children demonstrating academic mastery is virtually identical to the proportion of middle-class children who do so" (p.95).

The effective schools model is used to develop improvement plans for low functioning schools to increase student achievement by providing a guide to identify best practices in educating students. Four periods mark the different eras of the effective school movement beginning in 1966 to the present. Effective schools research began as a response to the Coleman report which concluded that public schools were not responsible

for making a significant difference in student achievement. Education researchers who refused to accept the findings of the Coleman report began searching for schools with student populations from low income families that were successful (Association for Effective Schools, 1996).

Early research was limited and had a specific focus from the perspectives of school improvers and providers of external support to schools (Sammons et al., 1995). Three important features of the early school effectiveness research incorporated clientele of poor or ethnic minority children, subject matter including basic skills in reading and math, and equity for children of the urban poor to achieve at the same level of those from the middle class (Sammons et al., 1995). The basic tenets of the early effective school movement is a belief that student learning can be improved if schools implement effective practices. Recent research provides evidence that student ability and family background play a major role in determining achievement levels, but schools can also be instrumental in successfully affecting educational progress.

Education researchers who have been involved in meta-analyses on effective school reform included Ronald Edmonds, Wilbur Brookover, Jaap Scheerens and Roel Bosker, Lawrence W. Lezotte, Willard R. Daggett, and Robert Marzano (Daggett, 2005). Those conducting the meta-analyses looked for commonalities among schools that were successful in creating positive learning environments where all students could be successful. Instructional leadership, focused school mission, orderly environment, high expectations, mastery of basic skills, frequent monitoring of results, meaningful parent involvement, opportunity to learn, and student time on task are the characteristics

included in the correlates of the effective schools model (Association for Effective Schools, 1996).

Effective schools have an equal percent of a school's highest and lowest social classes of students meeting minimum mastery requirements. Daggett cited Edmond's characteristics of effective schools that include strong administrative leadership, focus on basic skills, high expectations for student success, frequent monitoring of student performance, and safe and orderly schools (Daggett, 2005). Edmonds' characteristics were a starting point for future studies and became incorporated into the "Correlates of Effective Schools."

Robert Marzano (2003) conducted a meta-analysis of educational research that studied factors of effective schools. The basic premise of Marzano's work is: "Schools can have a tremendous impact on student achievement if they follow the direction provided by the research" (Marzano, 2003). He further states "the problem in low performing schools is not getting people to work hard, it is getting people to do the 'right work'" (2001). In his book *What Works in Schools: Translating Research into Action,* Marzano examined and summarized thirty-five years of data from a variety of recent studies from which he developed a list of common factors found in effective schools.

Focusing on factors identified as critical to improving educational opportunities that will improve student learning and should also be included in the implementation of a school reform model. School districts continually seek approaches that focus on doing the "right work" to facilitate teachers in improving classroom practices and impact student learning. A comprehensive survey based on Marzano's book *What Works in Schools: Translating Research into Action* was published by the Association for Supervision and

Curriculum Development (ASCD) to assist schools in identifying school operations, student background, and teacher effectiveness level factors for staff members to focus on when creating plans of actions to improve student learning and the implementation of a school reform model. Marzano advises educators to use a model that identifies areas to focus on those leading to improvements in student achievement (2001). In this age of accountability, results from a systematic research based instrument are an important source of information for educators to use when identifying critical factors for improving student learning.

Most of the research on the effective school movement has been done with a focus on the need changes in practice for low performing school to improve student academic achievement. A meta-analysis of 35 years of study comminuted in *What Works in Schools: Translating Research into Action* by Robert Marzano has three factors that affect students in schools. The three broad categories Marzano uses to categorize to organize school improvement are school-level factors, teacher-level factors, and student-level factors.

Summary

The review of literature presents information on the education reform in the United States, Expeditionary Learning model, and Effective Schools movement. School reform in the United States is for the purpose of improving education for students, so they might be able to be productive citizens and maintain the lifestyle of past generations. State and national legislation has mandated school accountability through the various acts. The increasing demands on schools have resulted in the development of various school reform models to provide educators with many choices when creating an

improvement plan. One school reform model, Expeditionary Learning was developed by Outward Bound bringing the wilderness environment into an urban classroom setting. EL schools model changes in how students are taught and held accountable for their learning and provides professional development for teachers. As educators looked for ways to improve student achievement and meet the demands of new legislation, the Effective Schools movement established criteria for increasing student achievement in low performing schools. A meta-analysis of 35 years of study culminated in *What Works in Schools: Translating Research into Action* by Robert Marzano provided educators with ways to bring about the necessary changes.

The presentation of methodology and procedures used for data collection and analysis is found in Chapter Three. Methodology and procedures are organized by population, sample procedures, instrumentation, validity and reliability, data collection procedures and the analysis, and hypothesis tests along with the limitations to show qualitative and quantitative research methods of the study.

CHAPTER THREE

METHODS

This chapter contains information on the research design of this quantitative and qualitative study on the effect of the implementation of the Expeditionary Learning (EL) school reform model on the effect on teacher perceptions on school operations, student background, and teacher effectiveness level factors. Information about the population, sample and procedures of selecting individuals to be apart of the study are included in the study. Instruments and their validity and reliability along with how they measure the proposed research questions are also included in the chapter. Data collection procedures and the analysis and hypothesis tests along with the limitations of the study complete the chapter.

Research Design

This mixed quantitative and qualitative study was designed to determine whether the EL model affected the perceptions of teachers on school operations, student background, and teacher effectiveness level factors. The dependent variable in this study was the perception of teachers as measured by the independent variable, which was the implementation of the EL school model.

Qualitative

Qualitative research is "any kind of research that produces findings not arrived at by means of statistical procedures or other means of quantification" (Strauss & Corbin, 1990). Interviews are conducted to understand interviewee perspectives to retrieve their experiences, gain insight or information, obtain images of events which are usually not available except through observation, build trust, understand vulnerable relationship, and

record dialogue to be analyzed (Lindlof & Taylor, 1995). A qualitative study can be naturalistic by occurring in an everyday setting such as a classroom or school building (Chesebro & Borisoff, 2007).

Qualitative data collected from staff interviews and pencil/paper survey were designed by the researcher to provide teachers with the opportunity to respond to open ended questions related to school operations, student background, and teacher effectiveness level factors. Including the interviews and pencil/paper survey provided in-depth understanding of how the teachers perceived the implementation of the EL. The qualitative research was designed to support the results of the *WWIS* online survey. Interviews and pencil/paper survey research were conducted during the 2007-2008 school year in the individual schools.

Quantitative

Quantitative research is based on the scientific model that uses observable and numerical data to conduct hypotheses tests. Using numbers and statistical methods based on measurements of a study makes the research easy to replicate by others (Thomas, 2003). Researchers using quantitative data know in advance what they are looking for and design the study before collecting information. If data does not naturally exist in numerical measurable form, a research instrument can be designed to collect information which can be analyzed statistically (Muijs, 2004). Attitudes and beliefs can be used in a quantitative study when the research instrument is developed to allow participants to rate their feeling or beliefs.

The *WWIS* by Marzano survey utilized in this study was designed to quantify teacher perception of school operations, student background, and teacher effectiveness

level factors by measuring specific items related to educational operation and ideology. The numerical data generated from surveys allowed for the analysis of the differences between attitudes before and after the EL model was implemented on school operations, student background, and teacher effectiveness level factors.

Population

There were approximately 60 instructional staff members in 2008 at the elementary schools providing a teacher to student ratio of 1:17.5. The middle school had approximately 42 instructional staff members providing a teacher to student ratio of 1:14.7. Both elementary and middle schools are in a rural to suburban area near Kansas City, Kansas public school district. All teachers are fully licensed and considered highly qualified by the state of Kansas for their current positions.

The elementary teacher population was 96% white and 4% minority. Female teachers made up 88% and males 12% of the elementary teacher population. Educational levels for the elementary teachers were 68% had baccalaureate degrees and 32% had earned a masters degree. Middle school teacher population was made up of 97% white and 3% minority. Female teachers made up 69% and males 31% of the middle school teacher population. Educational levels for middle school teachers were 49% hold a baccalaureate degree and 51% had earned a masters degree.

Sampling Procedures

Qualitative

Teachers' names were selected for the interview in the spring of 2008. All names of teachers assigned to grade levels in each of the buildings were placed in an envelope. Special positions such as physical education, music, librarian, or special education from

the three buildings were placed in different envelopes. Twenty-six different envelopes were used to draw names from the three buildings. One name from each envelope was drawn by a building level administrator to be part of the interview sample.

The entire staff (n=102) at both elementary and middle schools were invited by the researcher to complete the pencil/paper survey at a faculty meeting in each of the buildings during the spring of 2008. Pencil/paper surveys were distributed at a faculty meeting in each of the schools and collected at a later date to give those not in attendances an opportunity to complete the survey.

Quantitative

The entire staff (n=102) at the two elementary and middle schools were invited by the administrators in their respective building to participate in the *WWIS* online survey in the spring of 2005 and 2008. Teachers were given access codes to enter their online responses to the surveys.

Instrumentation

Three different measurement methods were used in the study. The three instruments are discussed below in detail.

Qualitative

Interview questions were developed to measure the school operations, student background, and teacher effectiveness level factors. *WWIS* was the source used to develop the interview questions. School operations level factor questions include items that must be addressed in school policies and practices and are a consistent consideration from educational researchers (Marzano, 2003). The five school-level factors identified from the research and labeled by Marzano are; 1) guaranteed and viable curriculum, 2)

challenging goals and effective feedback, 3) parent and community involvement, 4) a safe and orderly environment, and 5) staff collegiality and professionalism (2003). Guaranteed and viable curriculum questions addressed how a school "guarantees" every student was taught the same curriculum in a given grade level regardless of the teacher delivering the content. Challenging goals and effective feedback questions concentrated on a combination of setting academic goals, implementing an assessment system, and providing feedback in a timely manner. Parent and community involvement questions focused on the structures in place that include parents and community members in important policy decisions concerning the everyday running of the schools (Marzano, 2003). Safe and orderly environment questions refer to the school-wide rules and procedures that create order and the feeling of safety for students and staff. Staff collegiality and professionalism questions ask about the manner in which staff members interact with each other and how they view their work as professionals.

Marzano's three student-level factors address student background characteristics important to academic success and influenced by the school. The three student–level factors include home environment, learned intelligence and background knowledge, and motivation (Marzano, 2003). Home atmosphere questions focused on the actions families provide to supporting their student's success in school is highly correlated academic achievement. Learned intelligence and background knowledge questions referred to the incidental knowledge base students have regarding the information addressed in school. Student motivation questions addressed how student's interest in learning the subject matter is offered in the school and their sense of value in terms of acquiring that knowledge.

The three teacher-level factors focus on matters under the supervision of the classroom teachers. Teacher-level factors include instructional strategies, classroom management, and classroom curriculum. Instructional strategies questions addressed the use of best practices that are research based teaching techniques that have been proven to be effective. Classroom management questions referred to the teacher's use of strong research based behaviorally effective management strategies. Classroom curriculum design questions ask about how teachers sequence and pace curriculum to build on students' prior knowledge (Marzano, 2003).

A script was read at the beginning of each of the pilot and fully structured individual interviews to inform teachers about the study. Teachers were informed that they would be part of a study about their perception on the implementation of the EL program in their school. Interviewees were informed that 25 other teachers were being interviewed about their perceptions of the implementation of EL and their name would not be used. Interviewees were also informed that they would be identified only by an assigned number and any information from the interview would be kept confidential and the recording of the interview would be destroyed once the study was completed. Permission to be included in the study and record their responses to the questions was asked of teachers. The script read by the interviewer provided teachers with the opportunity to ask for addition explanation if they had any uncertainty about any of the questions during the interview. A copy of the script can be found in Appendix B.

The first set of questions asked was for the purpose of collecting demographic information about the teacher's position and years of experience in education. Interview question that followed the demographic information were based on *WWIS* research by

Robert Marzano. Teachers were asked to share their perceptions on the implementation of EL on school operations, student background, and teacher effectiveness level factors. School operations question focused on items that must be addressed in school policies and practices, which affect teachers and administrators in a uniform way. Question numbers corresponding to the school operations, student background, and teacher effectiveness level factors can be found in Table 1. Interview questions can be found in Appendix B.

Table 1

Interview Questions on School Operations, Student Background, and Teacher Effectiveness Level Factors

Level Factors	Questions Number
School Operations Level Factors	
Guaranteed and viable curriculum	1
Challenging goals and effective feedback	2
Parent and community involvement	3
A safe and orderly environment	4
Staff collegiality and professionalism	5
Student Background Level Factors	
Home environment	6
Learned intelligence	7
Background knowledge, and motivation	8
Teacher Effectiveness Level Factors	
Instructional strategies	9-13
Classroom management	14
Classroom curriculum	15

Questions on the pencil/paper survey were developed to measure the school operations, student background, and teacher effectiveness level factors. The three factor

levels are divided into eleven sub factors based on Marzano's *WWIS* as described above in the interview instrumentation. Each of the questions had a column for yes, no, or does not apply answers and a space for teachers to make comments on their perceptions in each of the schools. Comments on the questions from teachers provided deeper insights into their perceptions of the implementation of EL on the school operations, student background, and teacher effectiveness level factors. The question numbers that corresponds to each of the school operations, student background, and teacher effectiveness level factors on the pencil/paper survey are found in Table 2. A copy of the pencil/paper survey is available in Appendix C.

Table 2

Pencil/paper Survey Questions on School Operations, Student Background, and Teacher Effectiveness Level Factors

Level Factors	Questions Number
School Operations Level Factors	
Guaranteed and viable curriculum	1
Challenging goals and effective feedback	2
Parent and community involvement	3-4
A safe and orderly environment	5
Staff collegiality and professionalism	0
Student Background Level Factors	
Home environment	8
Learned intelligence	0
Background knowledge, and motivation	9-10
Teacher Effectiveness Level Factors	
Instructional strategies	0
Classroom management	6
Classroom curriculum	7

Quantitative

Marzano's *WWIS* online survey has sixty-eight (68) closed response items where teachers answer questions about their perceptions of school operations, student background, and teacher effectiveness level factors (Marzano, 2003). The three factor levels are divided into eleven sub factors based on Marzano's *WWIS* which are described above in the interview instrumentation. A copy of the *WWIS* online survey is available in Appendix D. The numbers of the corresponding questions for each of the school operations, student background, and teacher effectiveness level factors on the online survey are found in Table 3.

Table 3

WWIS Online Survey Questions on School Operations, Student Background, and Teacher Effectiveness Level Factors

Level Factors	Questions Number
School Operations Level Factors	
Guaranteed and viable curriculum	1-5
Challenging goals and effective feedback	6-9
Parent and community involvement	10-13
A safe and orderly environment	14-18
Staff collegiality and professionalism	19-21
Student Background Level Factors	
Home environment	22-24
Learned intelligence	25-27
Background knowledge, and motivation	28-31
Teacher Effectiveness Level Factors	
Instructional strategies	32-55
Classroom management	56-63
Classroom curriculum	64-68

All questions were scored on a scale of 1 to 4 according to the extent teachers engage in a behavior, amount of change in practices needed to increase the academic

achievement of students, and effort necessary to significantly change the practices. For the question "To what extent do we engage in this behavior or address this issue?" teachers responded with a one if they think few if any do this and four if almost everyone does this. When responding to "How much will a change in our practices on this item increase the academic achievement of our students?" teachers marked their responses with a one if not at all and four for to a great extent (Marzano, 2003). The responses to "How much effort will it take to significantly change our practices regarding this issue?" were rated with a one if not much, three if a lot, but possible, and four as too much to do (Marzano, 2003).

Measurement

Qualitative

The purpose of interviewing teachers after the implementation of the EL model was to have a more in-depth understanding of their perceptions on how their school and district addresses the school operations, student background, and teacher effectiveness level factors that influence student achievement. Interview data consisted of responses to the open ended questions on their perceptions after one year of implementation of EL. Responses were used to assess what impact EL may have had on the school environment including similarities and differences in the teachers perspectives on school operations, student background, and teacher effectiveness level factors. School operations level factor questions provided responded the opportunity to give their perceptions on how student are provided guaranteed and viable curriculum, challenging goals and effective feedback, parent and community involvement, a safe and orderly environment, and staff collegiality and professionalism. Student background level factor questions provided

teachers the opportunity to give their perceptions on home environment, learned intelligence and background knowledge, and motivation. Teacher effectiveness level factors provided teachers with the opportunity to give their perceptions on instructional strategies, classroom management, and classroom curriculum.

The purpose of the pencil/paper survey after one year of implementation of the EL model was to provide a clearer picture of the teachers' perceptions on how their school and district addresses the level factors in this study that influence student achievement. Paper/pencil data survey consisted of the responses to the open ended questions on the teacher's perception to the level factors in this study. Respondents were able to give their perceptions on the level factors in this study to assess what impact EL may have had on the school environment. See the paragraph above for a description of the school operations, student background, and teacher effectiveness level factors.

Qualitative

Online survey data from the *WWIS* was used as a numeric measurement of teachers' perception of the implementation of EL on the eleven school operations, student background, and teacher effectiveness level factors that influences student achievement. The items on the survey were designed to measure 11 sub level factors, listed in the Table 3 above, which are believed to be connected to the largest student achievement gains according to on research conducted over the past 35 years (Marzano, 2003). Respondents were able to rate their perceptions on how teachers perceive the extent staff members are engaged in a behavior or addressed an issue, the amount of change needed in practices on an item to increase academic achievement of students, and the extent of effort needed to make a change in practice in the school operations, student background, and teacher

effectiveness level factors after one year of EL implementation. All questions were scored on a scale of 1 to 4 according to the extent teachers engage in a behavior, amount of change in practices needed to increase the academic achievement of students, and effort necessary to significantly change the practices. Teachers selected a one rating of to indicate low score and four for a high score. Responses to the questions by the teachers indicated items that need to be addressed to increase student achievement in their school or district.

Validity and reliability

Qualitative

The teacher interview and pencil/paper survey part of the study is qualitative; therefore, demonstrating validity and reliability is not necessary. Qualitative researchers are held to different standards than quantitative. In qualitative research the terms Credibility, Neutrality or Conformability, Consistency or Dependability and Applicability or Transferability are the essential criteria for quality (Golafshani, 2003). Credibility and transferability are used as the alternative criteria for internal and external validity in assessing qualitative research. Qualitative researchers use credibility criteria to establish that the results of a study are believable from the perspectives of the participants involved. Because the data from the study are from the teachers' perspective, they are the only ones who can rightfully judge the credibility of the results. Transferability is the extent to which the results of qualitative study can be generalized to another setting. It is primarily the responsibility of the researcher to establish transferability by describing the context and the assumptions that were central to the study (Trochim, 2006). The person who makes the transfer to a different setting is also responsible for judging how

reasonable the transfer was. Dependability is used as an alternative criterion for reliability in assessing qualitative research. It is the responsibility of the researcher to account for the continually changing setting, describe the changes that occurred, and how the changes affected how the researcher approached the study. Conformability is the extent in which the results are substantiated by others (Trochim, 2006). To establish conformability, researchers can document the procedures used for checking data, identifying and challenging the flaws in the study, search for and describe information that contradict prior interpretation, and conduct a data audit after the study. Traditional validity can be established because the items in the interview and on the pencil/paper survey were taken directly from the 11 factors in the book *What Works in Schools: Translateing Research into Action*. By definition, the instrument has face and content validity (Marzano, 2003).

Qualitative

The *WWIS* survey was validated based on three types of validity: face validity, content validity, and construct validity. Face validity is defined as the degree to which each question in an instrument appears to have a logical connection to measure what it intended to assess (Marzano, 2004). Content validity is defined as the degree to which the questions on the survey attend to the full range of the important aspects of the area being addressed (Marzano, 2004). Construct validity is defined as the degree to which the questions in an instrument focus on the underlying hidden factors within an area (Marzano, 2004).

The *WWIS* survey reliability was addressed by computing split-half reliability coefficients. Because the instrument assessed more than one factor and is not

unidimensional, it is appropriate to use the split-half coefficient to evaluate the reliability of the *WWIS* online survey (Marzano, 2004). The split-half reliability for the entire survey was .91 (Marzano, 2004). The reliability for the overall survey is high and the measurement error is reduced because of the length of the survey. An alpha coefficient is defined as the measure of the internal consistency reliability of an instrument (Ferketich, 1990). The Alpha coefficient range is from .00 to 1.00 signifying a low to very high internal consistency. The lower extreme is .00 and the upper extreme is 1.00 which is a perfect correlation among the items. For an instrument in early stages of development, the guidelines commonly used by many researchers consider at least .70 to be an adequate alpha coefficient. A more developed instrument would have a coefficient of at least .80 to be adequate. When the alpha coefficient is very high there may be many repeats among the items (Ferketich, 1990). The alpha coefficients for each factor are listed in Table 4.

Table 4

Alpha Coefficients for the 11 Level Factors

Factor	Alpha Coefficient
Guaranteed and viable curriculum	0.67
Challenging goals and effective feedback	0.60
Parent and community involvement	0.56
Safe and orderly environment	0.63
Collegiality and professionalism	0.62
Instructional strategies	0.74
Classroom management	0.75
Classroom curriculum design	0.71
Home environment	*
Learned intelligence and background knowledge	0.62
Motivation	0.72

Note: There were not enough items to compute an alpha coefficient (Marzano, 2004, p.3).

Data Collection Procedures

Qualitative

Interview questions for the study were developed in advance and functioned as a guide for the dialogue. Teachers being interviewed were provided a copy of the questions during the interview. The interview with each selected teacher was conducted by recording on an Ipod the answers to the questions. Prior to the questions being asked, teachers were read a statement asking for permission to record the conversation. The statement in the script also included information about the purpose of the research, how teachers would be identified, and that the recordings would be destroyed at the end of the research project. Individual interviews with each teacher lasted approximately 15 minutes and occurred during the summer and early fall of the 2008 school year. One-on-one interviews were conducted in a classroom setting at the school where the teacher is assigned to teach.

The pencil/paper surveys were answered voluntarily by teachers at the two elementary and one middle school. Staff members were given the pencil/paper survey during a faculty meeting. Teachers were asked to return the pencil/paper survey to the school office by the end of the week. A collection date one week later allowed staff members to have time to thoughtfully answer the questions.

Quantitative

All 102 staff members from each of the three attendance centers responded to the 68 items on the *WWIS* online survey in May 2005 and 2008. An individual access code was given to each teacher to gain entry to the *WWIS* online survey. Answers for each item were recorded according to the participant's numbers. The data were collected and

compiled by the Association for Supervision and Curriculum Development (ASCD) and reports with the results of the surveys were remitted to the school district. Reports were broken down by district and each individual school. Raw data were requested by the researcher and provided by ASCD with permission from the school district and Robert Marzano to conduct the study. Raw data from the *WWIS* online survey was converted to the Statistical Package for Social Sciences (SPSS) for Windows Version 16.0.

Data Analysis and Hypothesis Testing

Data analysis and hypothesis testing included information from both the qualitative and quantities components. Answers to teacher interview and pencil/paper surveys questions were used for qualitative data analysis. The teachers' rating to the three answers for each of the items on the *WWIS* online survey provided data for analysis and hypothesis testing. Two factor Analysis of Variance (ANOVA) tests were conducted to test the hypothesis.

Qualitative

Analysis of open ended questions from the teacher interviews is found in Table 1. Answers given for each of the interview questions were grouped by similarities and differences. By grouping the answers to the interview questions in to similarities and differences, detailed information on the teachers' perceptions of school operations, student background, and teacher effectiveness level factors can be analyzed.

Analysis of the data from the pencil/paper surveys open ended questions was made by grouping the answers for each of the questions into themes of similarities and differences can be found in Table 2. Grouping the answers gave a clearer picture of the teachers' perceptions of school operations, student background, and teacher effectiveness

level factors. The yes or no responses were also reported and analyzed by the total number of those completing the pencil/paper survey.

Quantitative

Analysis of the data from the *WWIS* online survey was made after all participants completed their questionnaire. A table of the item numbers corresponding to the level factors can be found in Table 3. Items asked on the *WWIS* online survey can be found in Appendix D.

The statistical analysis of the data was conducted using the Statistical Package for Social Sciences (SPSS) for Windows Version 16.0. Data obtained from the online survey were examined and are presented in tabular form and discussed in Chapter Four. Hypotheses were tested to determine if any significant differences exist between the 2005 and 2008 *WWIS* survey. Two factor Analysis of Variance (ANOVA) tests were conducted using the Statistical Package for Social Science (SPSS) 16.0 Faculty Package program to determine if there were differences in responses based on time, factors, and an interaction between time and factors for each of the three questions at the three levels.

Limitations

The study described samples from three schools after one year of implementation of the Expeditionary Learning model in a rural to suburban Kansas City, Kansas public school district. Professional development opportunities on various EL protocols may have differed between the three schools. Twenty-six teachers were selected for the interview and 68 teachers volunteered to answer the pencil/paper survey. Attitudes and experiences were not assumed to be held by all teachers in each of the schools. Findings after subsequent years of implementations may have different results. In addition,

concerns with changes in staff or administration and staff configuration, and time spent in team collaboration may have varied.

Summary

Chapter Three includes information on the method of conducting the mixed quantitative and qualitative study on the effect of Expeditionary Learning on teacher's perceptions of the school operations, student background, and teacher effectiveness level factors. Selected sample interviews, open-ended survey, and a voluntary online survey, were used to collect data for the study from two elementary and one middle school teacher population. Limitations to the study were also included in the chapter. Chapter Four contains data and analysis for the qualitative and quantitative study. Summaries and findings are discussed along with the supposition for practice, conclusions, and suggestions for future research are explained in Chapter 5.

CHAPTER FOUR

RESULTS

Introduction

The purpose of this mixed qualitative and quantitative study is to determine if the implementation of the EL model has an affect on teacher perceptions of school operations, student background, and teacher effectiveness level factors in two elementary and one middle school in a rural to suburban Kansas City, Kansas public school district. Specific research questions proposed in Chapter 1 are addressed. Qualitative research was conducted through the use of teacher interviews and a pencil/paper survey. Quantitative research was conducted with teachers completing a *What Works in Schools: Translating Research into Action* (*WWIS*) online survey. Analysis of Variance (ANOVA) was used for hypotheses testing. The research questions are:

1. How do teachers perceive school operations level factors after one year of implementation of the Expeditionary Learning model?
2. How do teachers perceive student background level factors after one year of implementation of the Expeditionary Learning model?
3. How do teachers perceive teacher effectiveness level factors after one year of implementation of the Expeditionary Learning model?

Hypothesis Testing

Qualitative Study

Interviews

Teacher interviews were held during the summer and early fall of 2007 after one year of implementing EL in two elementary and one middle school in a rural to suburban area near Kansas City, Kansas public school district. A select group of 26 teachers were

interviewed about their perceptions of school operations, student background, and teacher effectiveness level factors after one year of implementing EL. The group of teachers was selected based on their assigned grade level or subject area in their building. Demographic for the select group included 81% females and 9% males. Information reported on attending EL training was 85% had participated in the 2007 Summer Institute, and 48% had gone to off-site experiences. Years of experience in education average for the selected group was 12.04 and 8.92 years of employment in the district was reported by the teachers.

School Operation Level Factors

When responding to the question about guaranteed and viable curriculum, nearly all of the teachers replied with an answer centered around the use of curriculum maps based on state standards. The teachers discussed how horizontal alignment with vertical alignment between grade levels was developed by creating curriculum maps which provided a scope and sequence. Curriculum maps were based on state standards and developed throughout the year during collaborative meeting with subject and grade levels. One third of the teachers talked about using the curriculum maps to ensure that all teachers were on the same page and students received the same content of the written curriculum during the year. One fourth of the teachers mentioned the use of the online grade book and quarterly assessments results and analyses reflections to document which standards were taught. Only one teacher did not know how the school guaranteed that students at each grade level received the same essential content based on the written curriculum.

Teachers responded to the question on setting challenging goals and providing effective feedback for students as an activity addressed in individual classrooms. Teachers reported using activities during the advisory period, for developing portfolios and for using test reflections to set quarter and annual goals. Activities for setting goals included teacher student conferences, graphing achievements, and keeping folders for documentation of academic progress. Parents are also involved in setting goals for their students during Student Improvement Plan and Individual Education Plan meetings according to the teachers. Classroom goals are many times established through the use of posted learning targets. Learning targets are stated in student friendly language by beginning with "I can..." and many times include goals on meeting state assessment indicators. School wide goals are tied to state assessment scores and include the use of reflections on results from the previous year. One teacher expressed concern about goal setting. The teacher stated that this was as an area where the school struggled with monitoring goals once they were established. Another teacher stated that the school did not set many challenging goals. This teacher attributed the lack of challenging goals to a previous experience where the goals were too difficult to reach which resulted in a loss of interest. Observations from teachers on providing students with effective feedback included comments on classroom assignments and results from quarterly and state assessment results.

Volunteering to work in the classroom was the response most often given by teachers about parents and community members' involvement in their school. Parents and community members' participate in programs such as Youth Friends through the school district or as experts on a topic during an EL in-depth investigation. Newsletters provide

parents and community members with information on the various volunteer opportunities in the schools according to the teachers. Access to the online grade books and a phone reach system are also used to keep parents informed and encourage involvement in school activities were reported by the teachers. According to the teachers, some of the activities parents and community members can also participate in include fundraising events, math and reading family nights, school site councils, parent support groups, and parent teacher organizations. Teachers also cited music and sporting events that are always open for parents and community members to attend. Student participation in service learning activities is another way the schools are involved in the local community. One teacher commented that parents and community members are welcome to be part of the school community, but are not actively asked to be involved. According to one teacher the evening family math and reading nights were not very productive and the school was working to improve the activities to increases involvement with parents and community members.

According to the majority of the responses from the teachers who were interviewed, Behavior Intervention Support Team (BIST) program was used in their classroom to maintain a safe and orderly environment. A large number of teachers reported establishing student behavior rules, regulations, and expectations which include a no tolerance policy for bulling as important in maintaining a safe and orderly environment. Classroom rules were sometimes reported to be student generated. School codes of conduct with clearly stated expectations and rules are published in the faculty and student handbooks according to some of the teachers. To insure that students know what the expected student behavior is, teachers reported practicing procedures on the

rules and regulations. Assigning teachers to duty stations for arrival, dismissal, and hall duties was another way reported to be helpful in maintaining a safe and orderly environment. Teachers are expected to triage with students first thing in the morning to assist with student behavior and reinforce school rules such as the dress code. An assistant principal in each of the school is assigned the responsibility of enforcing school and district policies concerning student behavior was also mentioned by the teachers.

According to the majority of the teachers interviewed, staff involvement in professional development and decision making was the responsibility of the leadership team in each of the buildings. The leadership team is responsible for developing a school calendar for professional learning opportunities and dispersing information on school decisions to advisees' grade or subject level. Most professional development opportunities are guided by EL practices and protocols according to the comments from the interviews. Other opportunities reported by teachers for professional development include off site EL training, weekly grade level and department meeting, monthly faculty meetings, and district level offerings. Teachers are expected to share their experiences and information from off-site EL workshops with the school faculty. Staff involvement in decision making, besides the leadership team, includes open conversations with administrators where teachers are encouraged to make suggestions and share their opinions and concerns on various topics. Several teachers reported completing surveys as a way to include staff opinions in making a decision. One teacher reported he/she did not know how the staff was involved in decision making in their building.

Student Background Level Factors

The number one response by the teachers on how the schools address the home environment level factor on helping parents attend to the needs of their students were through parent meetings. Parent meetings included teacher conferences, team meetings, student improvement team meetings, and individual education plan meetings. Teachers reported that they are available before and after school, use email, and place information on their web sites to help parents with addressing the needs of their students. Others services reported by teachers to help parents with their students included after school tutoring, online access to grades, and parent math and reading learning nights. Additional assistance available to help parents with their students include English as a second language support, BIST specialist, school counselors, Title One reading, and special education teachers were also reported. Newsletters that provide parents with information on up coming events and additional resources to help them with their students were also cited by a couple of teachers. One teacher reported that help for parents who need assistance in meeting the needs of their student was handled mainly by office personnel.

A question derived from the learned intelligence and background knowledge level factors focused on schoolwide programs students are involved in to increase learning. The number one response from the teachers was the after school tutoring programs followed by implementation of EL. A variety of programs all students have access to during the school day were mentioned and include several reading programs, music courses, book clubs, science fair, Everyday Math series, and a reteach and enrichment course. Programs available to a selected group of students to improve learning reported by the teachers included the Talented and Gifted program, support for non English

speaking students, social work services, and Title One reading support. Two opportunities for students to work with an adult outside of the school community included having a Youth Friend and a school/community mentoring program. Extracurricular activities which provide students with an opportunity to increase learning were student leadership teams, after school clubs, intramurals and competitive athletic events, and movie nights. Some students are also involved in service learning projects both during the academic day and after school hours. One teacher was not sure of the opportunities that were available to students to increase their learning.

Individual classroom activities were reported by the majority of teachers as the method most often used in motivating students to engage in learning in their building. The number one way to motivate students was using various EL protocols to engage learning. EL protocols mentioned include building background knowledge activities to accessing prior information, having authentic audiences for the final product, investigations with compelling real world topics, and incorporating the 10 design principles into lessons. A few teachers mentioned using goal setting activities which included SMART (Specific, Measurable, Achievable, Realistic, and Timely) strategies to motivate student learning. Several teachers described the use of individual classroom incentive programs and team reward parties. Teacher enthusiasm along with their relationships with students was cited by a few of staff members as ways to motivate students. Incorporating student interest and technology in lessons was also suggested as a way individual teachers motivate student learning. Passing grades, especially at the middle school for sports and after school dance eligibility, is a motivator for many students according to a few teachers. All school motivation programs include the

presentation of learning in community meetings, Read Across America, slam dunk assembly during testing week, selection to serve on the student leadership team, reading program rewards, honor roll parties, BIST, and fund raising opportunities. One teacher stated that there were not currently as many school wide programs to motivate students as in the past. Another teacher was not sure if there were any school wide programs to motivate student learning.

Teacher Effectiveness Level Factors

Teachers described a variety of strategies when answering the question on the instructional level factor question on how they begin a unit of study in their classroom. Many teachers' answers included using various EL protocols to begin a unit of study in their classroom on a regular basis. Building Background Knowledge (BBK) was the EL protocol most often cited by teachers as a way to begin a unit of study in their classroom. The BBK protocol includes using guiding questions, learning targets, accessing prior knowledge, and reading activities over the compelling topic. Other EL protocols mentioned by teachers as instructional strategies used to begin a unit of study were gallery walks (visual displays), fishbowl (classroom discussions), expert speakers, word walls, mini lessons, and the workshop model. In addition to EL protocols, teachers reported using strategies that accessed prior knowledge, learning games, hands on activities, cooperative group work, direct instructions, and reflection writings. Strategies that included the use of all types of visual activities including book talks and computer programs were also mentioned by several teachers. One teacher cited the use of students providing instructions on a new topic. Other teachers said they begin units of study using a variety of "hooks" that include starting with the end in mind by modeling the final

product, assessing the skills students need by administering pre tests, and by providing an overview of the new unit of study.

Answers to the interview question about assigned task typically used during a unit of study on a regular basis were varied and many times were course specific depending on the teaching assignment. A number of teachers referred to the use of EL protocols that they frequently use in their classroom. Protocols mentioned included group activities such as think pair share, workshop model, creating graphic organizer anchor charts, partner writing assignments, and completion of a final product. Most of the teachers reported using assignments that addressed reading, writing, and problem solving skills as most commonly used in their classroom. Reading skills included book studies, guided reading in textbooks and with supplemental materials, shared and group readings with comprehension questions, and text features skills activities. Classroom writing activities described by teachers included the use of reflection journals, daily vocabulary drills, and research assignments. Problem solving skills included in several classrooms consisted of demonstrations, experiment labs, games, and puzzles used to assist student in learning by discovering what they see. Several teachers talked about using physical activities to create movement for students who have difficulty staying seated during class. A few teachers said they make use of practicing a particular skill daily in their classroom to facilitate student learning. Self and peer evaluations and quizzes along with pre and post tests were also reported by several teachers as a common strategy used in their classroom to provide students with a learning opportunity. Other instructional strategies reported to be incorporated into a classroom were speaking, listening, goal setting, and cross

curricular activities. One teacher mentioned using jobs in the classroom as an instructional strategy to enhance student learning.

Almost all of the teachers reported organizing the students in their classroom in a variety of group configurations for instruction on a regular basis. Several teachers mentioned organizing their classroom with the flexibility to easily move students from sitting in rows to working in small groups depending on the activity. Group sizes ranged from two to four students and many teachers cited using ability grouping to facilitate the use of peer helpers and models. Other teacher said they used random grouping methods to mix up the students depending on the activity. Additional grouping considerations included student placement according to individual needs of the student such as special education to facilitate paraprofessional access, English language learner support, and behavior concerns. Students with special needs were often times given preferential setting and grouping to insure maximum learning according to several teachers.

Teachers reported using various formal and informal ways in which feedback was provided on student learning in their classroom on a regular basis. The answer most frequently given about providing feedback by the teachers interviewed was returning student work with grades and comments in a timely manner. Many teachers stated that they provided students with immediate feedback on their learning through verbal comments and one on one conferencing. Several teachers mentioned using rubrics on projects and as a self check with classroom consensus as a way to provide feedback on student learning. Feedback on reflections sheets, journals, goal folders, and portfolio assessments were also cited by several teachers as a way to provide students with information about their learning. Classroom activities used to provide students with

feedback on their learning that were mentioned by teachers included incorporating a critic protocol with peer group edit on projects, questioning with thumbs up or down responses, and exit tickets. One teacher reported graphing pre and post tests as a way to provide students with information on their learning. Other ways of providing feedback to students and parents included providing weekly grade check sheets and folders with graded assignments for the week were also reported by the teachers interviewed.

Project/performance and traditional assessments were equally cited by over half of the teachers as the way they regularly brought closure to the end of a unit. Class share outs with anchor charts that tie learning experiences to fieldwork activities were reported by a number of the teachers. Several teachers cited using class discussion, exit slips, and games to provide closure to an end of a unit of study. Using a celebration and other follow up activities related to the unit after a test was also mentioned by a few teachers. A couple of teachers reported using reflection papers on the unit to be included in student portfolios and tie previous and upcoming activities together.

The BIST program was the number one response to the question on the classroom management level factor. About 75% of the teachers reported using the BIST program in their classrooms to manage student behavior. Using the steps to the BIST program builds a student-teacher relationship and reinforces expected behavior according to several teachers. Having a one on one conversation between the teacher and student as part of the BIST program allows the child to see the importance of treating others as they would like to be treated was mentioned by some of the teachers interviewed. A few teachers cited the importance of knowing the individual students' background information when managing classroom behaviors. Several of the teachers described using pro active

activities such as a classroom economy incentive system to reward students for positive behaviors. Other examples given by teachers about how they manage student behaviors in their classroom included rearranging seating, using humor to handle certain situations, parent contacts when necessary, and the importance of modeling expected behavior. When students are excited about learning and allowed to have input into the classroom expectation, classroom management is not a big problem in the school according to three teachers.

When asked about designing classroom curriculum, over half of the teachers interviewed said a group process was used to identify which indicators were to be taught in each unit. Teachers used grade level or subject level meetings to work together on designing a curriculum map with identified district, state, and national required standards to be used throughout the year. One teacher cited vertical alignment of delted standards through meetings with grade levels before and after to insure all indicators were taught prior to state testing. Another teacher mentioned using EL in-depth investigation to incorporate state standards into the units being taught as the process used to design classroom curriculum. All but one teacher said they used required state standards and benchmarks to identify what students are expected to learn. Only one teacher cited the use of an inventory to identify what students are expected to learn. Another teacher reported using topics that were of interest to students to determine what was taught if there was time to cover additional units. Text book series were also mentioned as a way to identify expected student learning items.

Pencil and Paper Survey

The pencil/paper survey was answered by 68 teachers from the two elementary and middle schools in a rural to suburban area near Kansas City, Kansas. Of the teachers answering the questions, 13 were males and 55 were females. Of the teachers completing the survey, 36 had undergraduate degrees and 26 had advanced degrees. Fifty of the teachers attended the EL 2007 Summer Institute and 28 have received off site training. All teachers were fully licensed and considered highly qualified by the state of Kansas for their current position.

School Operations Level Factors

When questioned about modifications that have occurred in having a guaranteed and viable curriculum since the implementation of EL, 82% of the teachers reported changes were made in the delivery and amount of time spent on curriculum. The delivery of curriculum has changed to include EL protocols according to the teachers. Different EL protocols have students involved in more group work, which is believed to add relevance to their learning. Students take an active role in learning by assuming more responsibility for their education. Spelling assignments have now become homework activities and the daily reading series is used as a resource for in-depth investigations. Teachers commented on an increase in the amount of time needed for planning in-depth investigations. Planning is seen as more detailed and must be adjusted to fit in everything being taught including collaborating with elective teachers as part of an in-depth investigation. Teachers also reported that writing curriculum was more difficult and they lacked training. An increase in the amount of time to align state standards and local indicators to fit EL protocols in order to deliver the required curriculum was noted by the

teachers. Because in-depth investigation focuses on specific standards, some indicators had to be dropped in order to accommodate the amount of time spent on a specific study. However, teachers reported that using the workshop model to teach one standard explicitly did not change the amount of time needed to plan or deliver the curriculum.

Approximately 62% of the teachers indicated there was a change in the use of goal setting and the utilization of data for feedback after the implementation of EL. Several teachers believed the use of learning targets in kid friendly language was a change from previous years. Middle school teachers reported they worked with students in advisory period on goal setting activities and wrote reflections on quizzes and tests. Goal setting was used in some of the building prior to EL and teachers continued to reflect as the year progressed. Working in a collaborative setting with core and elective teachers was noted as a change in the practice of goal setting. Teachers reported that a change in goal setting and the utilization of data for feedback had not yet happened, but they were hopeful for an increase in the future. A few teachers reported collecting data, but believed there needed to be a movement toward the use of information to guide instruction. Other teachers stated that quarterly assessments have allowed them to examine data and compare traditional to standards based assessments for analyzing student progress.

Two questions were asked about the parent and community involvement level factors. Of those answering the question on whether opportunities for parents and community members to become involved in the school's operations have changed with the implementation of EL, 60% said there was a change. Most of the teachers reported an increase in the use of parents and community members as experts for in-depth

investigations and fieldwork. Parents and community members were invited to speak to the students and work with the children on projects. Some teachers expressed the belief that it was too early to tell if EL would help in building partnerships with parents and community members, but they were hopeful that more opportunities for involvement would happen in the future. A few teachers noted there was more community "buy in" for the EL model through the use of experts and fieldwork experiences. Those answering "no" to the changes in practice before the implementation of EL, believe the same parents continued to be involved in the school as before. Others were not sure the community was informed about or understand the EL model. Not sure of the opportunities parents and community members had to be involved in the school prior to the implementation of EL was another response given for the lack of change.

The second question on parent and community involvement level factors addressed the way the school communicates and receives information from parents since the implementation of EL. No change was perceived by 63.4% of the teachers on the way the school communicates and receives information for parents. Many teachers believe the school was already doing a great job of communicating with parents through online newsletters and showcase information activities. Other teachers were not sure of the ways the school communicates with parents or did not believe that EL had been in existence long enough to make a difference. One teacher noted the communication flow was from the teacher to the student.

Little change was reported in the safe and orderly environment factor on changes in the student discipline system in the school by the teachers. Approximately 76% of the teachers reported no changes in the student discipline system. A reason cited by teachers

for the lack of change was in the continued use of the BIST program. BIST was already in place prior to the implementation of EL. Teachers who perceived a change in the discipline system reported a shift away from using BIST because there was not enough time to focus on both programs. Some teachers recounted that because students are more engaged in the learning process; busy students are not usually a discipline problem because they are less likely to act out.

School Background Level Factors

There was no perceived change in the home environment level. This may have been because of only one year of EL implementation. Nearly 56% of the teachers responding to the pencil/paper survey indicated they were not aware of any changes or did not know what parent training and support was provided prior to EL. While the majority of teachers believed little change had occurred, some reported activities such as parent and family nights for the purpose of explaining EL along with community meetings and parent teacher conferences were now available for parents. A small number of teachers believed of the meetings that were held, there was more information of substance provided for the parents. Hope for the future was expressed as the implementation of the EL model continues.

A change in the learned intelligence and background knowledge level factor was reported by approximately 67% of the teachers. When asked about any changes in experiences outside of the classroom, teachers reported an increase in the quality and use of relevant fieldwork for educational purpose since the implementation of EL. Protocols and activities tied to fieldwork added depth to the learning experiences and students were very excited and eager to learn during investigations. Fieldwork experiences connected

to the curriculum and provided students with more real world experiences. Students were held more accountable for their own learning and were excited to be involved in activities rich with knowledge. During fieldwork activities, students began making connections across several subject areas. Some staff members reported that strong teachers should have been doing quality field experiences all along, while others noted the lack of previous outside experiences before the implementation of EL. While some teachers perceived the use of fieldwork throughout the school, others did not believe experiences outside the classroom have changed. Reasons given for the lack of change in fieldwork experiences outside of the classroom included finding relevant community resources and concerns about money for fieldwork.

The student motivation level factor question was answered by 60.9% of the teachers perceiving a change in the way students are inspired to learn during the first year of implementation of EL. Teachers reported students being motivated when they feel success and experience positive learning activities that allow them to feel empowered. In-school suspension students' feeling left out and missing out on activities was also viewed by the teachers as a motivation for students learning. When activities are more active and student driven, students appear to be involved in the compelling topics of investigations. Students anticipating what will come next and having an authentic product as an end goal can in itself be a motivator. Using the EL design principles on the responsibility for learning and the different protocols such as learning targets (objectives), mystery pieces (hook), and gallery walks (visual display) can provide motivation according to the teachers. Those who did not see a change in the way students

are motivated to learn stated that not much had been done during the first year but hoped for more in the future.

Teacher Effectiveness Level Factors

Answers to the question on the classroom management level factor by the teachers indicate that changes did not occur with the implementation of EL. Nearly 60% of the teachers reported that changes did not occur in their classroom management system since the implementation of EL. Teachers reporting no changes justified their answer by stating they continued with the same expectations and the sustained use of the BIST model. Those who reported a change fell into two categories; one group saw a positive change while others express having less structure and more management issues. Changes in classroom management systems perceived by teachers included more structures, building relationships among students, using additional group activities, focusing on the school community, and combining projects. A few teachers saw the change in classroom management by allowing students to be more actively engaged in hands-on activities. Several teachers expressed hope that their classroom management system would change slowly over time.

Of the teachers responding to the question on the instructional strategies and classroom curriculum design level factor, 84.1% said that the designing of lesson plans had changed since the implementation of EL. The planning process was reported to have changed somewhat with the implementation of project based learning with compelling topics which drive in-depth investigations. Teachers reported that they had begun to use bits and pieces of EL protocols when appropriate. Expectations, goals, design principles, and long term planning are used to identify learning targets. Learning targets are now

included in the designing of lesson plans. Other changes in lesson plans noted by teachers included more student centered and driven activities with hands-on projects. Mini-lessons and the workshop model developed with the end in mind have changed the way teachers design lesson plans. Several teachers reported the need to spend addition time for developing lesson planning and writing reflections since the implementation of EL. Making modifications in only one area and developing lesson plans to include morning meetings were also noted by the teachers as a change in designing lesson plans.

Quantitative Study

Electronic On-line Survey

The *WWIS* online survey is organized into school, student, and teacher. Each of the three level factors which are divided again into 11 specific level factors based on Marzano's research (Marzano, 2003). Survey data are from items based on the three factors and eleven sub-factors and are presented below. Survey items were rated by respondents on three dimensions: according the extent teachers engage in a behavior, the magnitude of change needed in practices to increase the academic achievement of students, and the amount of effort will it take to significantly change the practices. Data from the survey can help schools identify what behaviors and items they are not doing well on, if changes in practice will improve student achievement, and how much effort it will take to make changes. Items selected for school improvement plans should have a low rating on the extent of engagement and amount of effort needed to make the change. Once those items are selected, schools should look the higher rating for the areas where a change in practice will improve student achievement.

A two factor ANOVA was conducted to test each of the hypotheses. The Statistical Package for Social Science (SPSS) 16.0 program was used. For each ANOVA,

three possible tests were conducted. The first tested the main effect for the collected data in 2005 compared to with those from 2008. A second tested the main effect for the survey school operations, student background, and teacher effectiveness level factors. A third tested the interaction effect between time and the survey factors.

ANOVA test data are organized according to the ratings of the items on the extent teachers engage in a behavior for the five school, three student, and three teacher level factors. Three ANOVA test are reported for each of the eleven (11) level factors. The three results reported from the ANOVA test include the main effect for the differences in time, main effect for the differences in responses between at least two of the survey factors, and for the interaction effect between time and the survey factors.

Extent Teachers Are Engaged

The extent teachers engage in a behavior or address an issue on the school operations, student background, and teacher effectiveness level factors questions indicate how well the teachers perceive the school is doing on a specific item. Teachers rated the items on a scale of one to four with one being low and four high.

School Operations Level Factor

School operations level factor questions include items that must be addressed in school policies and practices and are a consistent consideration from educational researchers (Marzano, 2003). The five school-level factors identified from the research and labeled by Marzano are; 1) guaranteed and viable curriculum, 2) challenging goals and effective feedback, 3) parent and community involvement, 4) a safe and orderly environment, and 5) staff collegiality and professionalism (2003).

ANOVA test data are organized according to the ratings of the items on the extent teachers engage in a behavior for the school operations, student background, and teacher effectiveness level factors are reported. Three ANOVA test are reported for each of the eleven (11) level factors. The three results reported from the ANOVA test include the main effect for the differences in time, main effect for the differences in responses between at least two of the survey factors, and for the interaction effect between time and the survey factors.

The results of the main effect for the differences in time ($F_{1,164} = .043$, $p = .863$) indicated no difference at the .05 level of significance. Means for the two years are included in Table E1 in Appendix E.

The results of the test for the main effect for the differences in responses between at least two of the survey factors ($F_{4,656} = 6.731$, $p = .000$) indicated a difference at the .05 level of significance. No additional analyses were conducted because the interaction was significant. Means for the factor levels are included in Table E2 in Appendix E.

The results of the test for the interaction effect ($F_{4,656} = 3.070$, $p = .016$) between time and the survey factors indicated a difference at the .05 level of significance. Means for the survey factor levels are included in Table 5. Because a significant difference was found, a post hoc test was conducted. The post hoc was used to isolate exactly where the significant differences were found. Based on the calculation of the post hoc test the difference between two means had to be at least .214 to be considered statistically significant. All possible results of the post hoc indicated the significant difference was between school level factors. The differences between the school level factors in one year only are not of interest in the present study. There was no significant difference between

factor 1 in 2005 and 2008. A significant difference in time would have been of interest to the study. The results of the post hoc can be found in Table E3 of Appendix E.

Table 5

The Interaction Effects of School Operation Level Factors and Time for Engaged

School Level	Guaranteed	Goals	Parent	Safe	Collegiality
2005 (n=91)					
Mean	2.938	3.173	2.978	3.009	2.978
Standard Error	.045	.061	.062	.079	.061
2008 (n=75)					
Mean	2.845	3.07	2.953	3.136	3.142
Standard Error	.050	.067	.068	.087	.067

Student Background Level Factor

Marzano's three student level factors address student background characteristics important to academic success and influenced by the school. The three student–level factors include home environment, learned intelligence and background knowledge, and motivation (Marzano, 2003).

The results of the main effect for time ($F_{1,164} = .151$, $p = .698$) indicated no difference at the .05 level of significance. Means for the main effect time are included in Table E4 in Appendix E.

The results of the main effect for the factors ($F_{2,328} = 204.743$, $p = .000$) indicated a difference at the .05 level of significance. There was a significant difference in the responses between at least two of the factors. No additional analyses were conducted

because this finding is of no interest in the context of this study. Means for the factors are included in Table E5 in Appendix E.

The results of the test for an interaction between the variable factor levels and the variable time ($F_{2,328}$= .737, p = .479) indicated no difference at the .05 level of significance. Means for the factor levels are included in Table E6 in Appendix E.

Teacher Effectiveness Level Factors

The three teacher level factors focus on matters under the supervision of the classroom teachers. Teacher level factors include instructional strategies, classroom management, and classroom curriculum.

The results of the main effect for the differences in responses in time ($F_{1,164}$ = .373, p = .542) indicated no difference at the .05 level of significance. Means for the two years are included in Table E7 in Appendix E.

The results of the main effect for the differences in responses in factor levels ($F_{2,328}$= 72.340, p = .000) indicated a difference at the .05 level of significance. There was a significant difference in the responses between at least two of the factors. No additional analyses were conducted because this finding is of no interest in the context of this study. Means for the factor levels are included in Table E8 in Appendix E.

The results of the test for an interaction between the variable factor levels and the variable time ($F_{2,328}$= .688, p = .503) indicated no difference at the .05 level of significance. Means for the factor levels are included in Table E9 in Appendix E.

Amount of Change Needed

The magnitude of change needed in practices to increase the academic achievement of the students is based on the perceptions of teachers based on the extent of

engagement in a behavior or addressing an issue. Answers to the extent teachers engage in a behavior or address an issue is qualified by the magnitude of change needed and gives direction on possible items needed for school improvement plans. Data from the questions should not be used in isolation, because the teachers answering the question may believe that an item is not addressed and would it significantly improve student achievement.

School Operation Level Factors

The results of the main effect for the differences in responses in time ($F_{1,164}$ = 2.263, p = .263) indicated no difference at the .05 level of significance. Means for the two years are included in Table E10 in Appendix E.

The results of the main effect for the differences in responses in factor levels ($F_{4,656}$= 7.271, p = .000) indicated a difference at the .05 level of significance. There was a significant difference in the responses between at least two of the factors. No additional analyses were conducted because this finding is of no interest in the context of this study. Means for the factor levels are included in Table E11 in Appendix E.

The results of the test for an interaction between the variable factor levels and the variable time ($F_{4,656}$= .864, p = .485) indicated no difference at the .05 level of significance. Means for the factor levels are included in Table E12 in Appendix E.

Student Background Level Factors

The results of the main effect for the differences in responses in time ($F_{1,164}$ = .991, p = .321) indicated no difference at the .05 level of significance. Means for the two years are included in Table E13 in Appendix E.

The results of the main effect for the differences in responses in factor levels ($F_{2,328}$= 9.372, p = .000) indicated a difference at the .05 level of significance. There was a significant difference in the responses between at least two of the factors. No additional analyses were conducted because this finding is of no interest in the context of this study. Means for the factor levels are included in Table E14 in Appendix E.

The results of the test for an interaction between the variable factor levels and the variable time ($F_{2,328}$= 1.128, p = .325) indicated no difference at the .05 level of significance. Means for the factor levels are included in Table E15 in Appendix E.

Teacher Effectiveness Level Factors

The results of the main effect for the differences in responses in time ($F_{1,164}$ = 1.726, p = .191) at the teacher level factors for the amount of change in practices on an item needed to increase student academic achievement indicated no difference at the .05 level of significance. Means for the two years are included in Table E16 in Appendix E.

The results of the main effect for the differences in responses in factor levels at the teacher level factors ($F_{2,328}$= .698, p = .498) indicated no difference at the .05 level of significance. Means for the factor levels are included in Table E17 in Appendix E.

The results of the test for an interaction between the variable factor levels and the variable time ($F_{2,328}$= 1.796, p = .168) indicated no difference at the .05 level of significance. Means for the factor levels are included in Table E18 in Appendix E.

Amount of Effort Needed

The amount of effort will it take to significantly change the practices also provides perceptual data. Items that would be relatively easy to change are rated with a one (1) and those where changes would be difficult receive a four (4) rating. Items with

lower rating are believed to be changes that schools have the time, resources, and energy to successfully make improvements in student academic achievement. For the items receiving higher rating near four (4), schools lack the time, resources, and energy to make changes are doomed for failure if selected for school improvement goals.

School Operation Level Factors

The results of the main effect for the differences in responses in time ($F_{1,164}$ = .012, p = .914) indicated no difference at the .05 level of significance. Means for the two years are included in Table E19 in Appendix E.

The results of the main effect for the differences in responses in factor levels ($F_{4,656}$ = 4.641, p = .001) indicated a difference at the .05 level of significance. There was a significant difference in the responses between at least two of the factors. No additional analyses were conducted because this finding is of no interest in the context of this study. Means for the factor levels are included in Table E20 in Appendix E.

The results of the test for an interaction between the variable factor levels and the variable time ($F_{4,654}$= .443, p = .778) indicated no difference at the .05 level of significance. Means for the factor levels are included in Table E21 in Appendix E.

Student Background Level Factor

The results of the main effect for the differences in responses in time ($F_{1,164}$ = .564, p = .786) indicated no difference at the .05 level of significance. Means for the two years are included in Table E22 in Appendix E.

The results of the main effect for the differences in responses in factor levels ($F_{2,328}$ = 52.344, p = .000) indicated a difference at the .05 level of significance. There was a significant difference in the responses between at least two of the factors. No

additional analyses were conducted because this finding is of no interest in the context of this study. Means for the factor levels are included in Table E23 in Appendix E.

The results of the test for an interaction between the variable factor levels and the variable time indicated ($F_{2,328}$= .261, p = .770) no difference at the .05 level of significance. Means for the factor levels are included in Table E24 in Appendix E.

Teacher Effectiveness Level Factor

The results of the main effect for the differences in responses in time ($F_{1,164}$ = .846, p = .859) indicated no difference at the .05 level of significance. Means for the two years are included in Table E25 in Appendix E.

The results of the main effect for the differences in responses in factor levels ($F_{2,328}$ = 26.657, p = .000) indicated a difference at the .05 level of significance. There was a significant difference in the responses between at least two of the factors. No additional analyses were conducted because this finding is of no interest in the context of this study. Means for the factor levels are included in Table E26 in Appendix E.

The results of the test for an interaction between the variable factor levels and the variable time ($F_{2,328}$= 1.001, p = .369) indicated no difference at the .05 level of significance. Means for the factor levels are included in Table E27 in Appendix E.

Summary

Qualitative and quantitative data results from specific research questions on teachers' perception on the implementation on Expeditionary Learning (EL) on school operations, student background, and teacher effectiveness level factors were described and analyzed. Data for the qualitative were collected from recorded interviews with 26 teachers and paper/pencil survey answered by 68 participants that were both based on

WWIS research by Robert Marzano. Quantitative data used in the study were collected from the *WWIS* online survey. Analysis of Variance (ANOVA) were used to analyze the quantitative data on the effect of EL on school operations, student background, and teacher effectiveness level factors. Summaries and findings are discussed along with the supposition for practice, conclusions, and suggestions for future research are explained in Chapter Five.

CHAPTER FIVE

INTERPRETATION AND RECOMMENDATIONS

Introduction

Chapter Five is organized into five sections presenting the data in this mixed quantitative and qualitative study's previous chapters. The study was guided by the research questions on teachers' perceptions on the implementation of Expeditionary Learning (EL) on school operations, student background, and teacher effectiveness level factors. An overview of the problem, purpose statement and research questions, review of methodology, and major findings of the study are found in the study summary. Findings related to the literature include a comparison and contrast of information in the review of literature and the findings of the study. A discussion of implications for action, recommendations for future research, and concluding remarks are included in the conclusions section.

Study Summary

Overview of the Problem

Effective education programs are imperative to increasing overall student academic achievement. Most schools look for comprehensive reform models that claim results in academic achievement. Information does not currently exist on why schools choose one particular reform model over another (Finnan, 2000). Schools should carefully examine the philosophy, methodology to improving academic achievement, professional development opportunities, provided materials, cost, and research on effectiveness as criteria to find a fit between the reform model and their needs and resources. Criticism of the research on school reform models suggests studies maybe

flawed because the developers are sometimes the evaluators (Borman, 2002). Research on the effect of a school reform model on the teachers' perception on school operations, student background, and teacher effectiveness level factors in the elementary school and middle school is limited.

Purpose Statement and Research Questions

The purpose of this mixed quantitative and qualitative study was to determine the effect of the EL model on the perception of teachers on school operations, student background, and teacher effectiveness level factors in two elementary schools and a middle school in a rural to suburban Kansas City, Kansas public school district. EL schools are purported to encourage a culture of supreme effort, high expectations, community and collaboration, service, diversity, and increase scores on state reading and math tests. Past research studies on the EL model have shown positive correlation to student academic achievement. Limited information was found that analyzed the impact of EL on the three level factors described by Marzano in *What Works in Schools: Translating Research into Action (WWIS).*

Research questions guiding the study included:

1. How do teachers perceive school operations level factors after one year of implementation of the Expeditionary Learning model?
2. How do teachers perceive student background level factors after one year of implementation of the Expeditionary Learning model?
3. How do teachers perceive teacher effectiveness level factors after one year of implementation of the Expeditionary Learning model?

Review of Methodology

This mixed quantitative and qualitative study was designed to determine whether the EL model improves the staff's perceptions on school operations, student background, and teacher effectiveness level factors in two elementary schools and a middle school population.

Qualitative research included the use of individual teacher interviews and a pencil/paper survey. Both the interview and pencil/paper survey questions were open-ended to determine teachers' perceptions of the school operations, student background, and teacher effectiveness level factors. Quantitative data used in the study were from the results of the online *WWIS* surveys from 2005 and 2008. Participants were asked to answer three questions on the survey for each of the sixty-eight (68) items and ranked their response on a scale from 1 to 4 with 1 being low and 4 being high:

1. To what extent do we engage in this behavior or address this issue?
2. How much will a change in our current practices on this item increase the academic achievement of our students?
3. How much effort will it take to significantly change our current practices regarding this issue (Marzano, 2003)?

Once quantified, Analysis of Variance (ANOVA) hypotheses tests were used to determine if there was a significant difference between the answers to the sixty-eight (68) items in 2005 and 2008. The dependent variables in this study were the school operations, student background, and teacher effectiveness level factors described in *WWIS* survey. The independent variable was the Expeditionary School model.

Major Findings

Qualitative research from the interviews and pencil/paper survey indicated that EL practices were being implemented as action steps to many of the school operations, student background, and teacher effectiveness level factors. Teachers who were interviewed reported using EL practices in the following school operations level factors: setting challenging goals, parent and community member involvement, safe and orderly environment, and professional development and decision making. Student background factor levels where EL practices were mentioned in the interviews included learned intelligence and background knowledge, and student motivation. EL practices cited in the response to the questions on the teacher effectiveness level factors were instruction, classroom management, and curriculum design.

Results from the pencil/paper survey also reflected the impact of the implementation of EL on the school operations, student background, and teacher effectiveness level factors. School operation level factors impacted by the implementation of EL according to the answers given by teachers on the pencil/paper survey were guaranteed and viable curriculum, challenging goals and effective feedback, and parent and community involvement. No changes were reported by the teachers on the pencil/paper survey for parent and community involvement and safe and orderly environment level factors. Student background level factors which were impacted by the implementation of EL according to the majority of teachers answering the pencil/paper survey were home environment, intelligence and background knowledge, and student motivation. Teacher effectiveness level factors in which teachers believed to have been impacted by the implementation of EL were instructional strategies and curriculum

design. The majority of teachers who answered the pencil/paper survey did not believe the implementation had changed their classroom management level factor.

Quantitative research data from the ANOVA tests revealed no significant statistical difference in the means for the main effect in time for the extent teachers are engaged at the school operations, student background, and teacher effectiveness level factors. At the student background and teacher effectiveness level factors for the extent teachers are engaged no significant statistical difference was found for the interaction between the variable factor levels and the variable time. Significant statistical differences in the means for responses between at least two of the survey factors were found for the school operations, student background, and teacher effectiveness for the extent teachers are engaged. The results of the test for an interaction between the variable factor levels and the variable time for the extent teachers are engaged at the school operations level facts was found to have a significant statistical differences. None of the significant statistical differences are of interest in the context of this study.

The data from the ANOVA tests revealed no significant statistical difference in the means for the main effect in time or the interaction between the variable factor levels and the variable time for the amount of change needed at the school operations, student background, and teacher effectiveness level factors. No significant statistical difference was also found at the teacher effectiveness factor level for the differences in responses in factor levels. A significant statistical difference was found at the school operations and student background level factors for the amount of change needed. None of the significant statistical differences are of interest in the context of this study.

No significant statistical difference in the data from the ANOVA tests in the means for the main effect in time or the interaction between the variable factor levels and the variable time for the amount of effort needed at the school operations, student background, and teacher effectiveness level factors. A significant statistical difference was found at the school operations, student background, and teacher effectiveness level factors for the amount of effort needed. None of the significant statistical differences are of interest in the context of this study.

Findings Related to the Literature

Results from the qualitative study using teacher interviews and the pencil/paper surveys can be related to the literature on school reform, the EL school model, and the Effective Schools movement. The quantitative results did not reveal the in-depth perceptions of the teachers; therefore the results related to the review of literature are based on expected changes from the implementation of EL. The results of the study parallel those found in the review of literature.

Literature on school reform movements in the United States revealed that models were developed for the purpose of changing schools to accomplish specific goals to meet the needs of students (Graham, 2002). Examples of the results from the interviews and pencil/paper survey indicated that teachers did perceive there were changes in the school's operations for the purpose of accomplishing specific goals to meet the needs of students. Detailed examples of changes include the use of curriculum maps based on state standards, the delivery and amount of time spent on developing classroom curriculum and allowing students to take an active role in learning by assuming more responsibility for their education after the implementation of EL. The increase in the

amount of time was needed to align state standards and local indicators to fit the EL protocols. Changes in the way the school seeks parent and community involvement to meet the needs of students was also reported by many of the teachers along with changes in classroom management systems, lesson planning process, an increase in the use of student centered and driven activities with hands-on projects, and including relevant fieldwork connected to the curriculum for instruction in the classroom.

Warren (as cited by Graham, 2002) defined education reform in the United States as "the effort to make schools more successful in enhancing student's attainment of academic subject material." Since the implementation of EL teachers reported using learning targets in student friendly language to insure attainment of academic subject materials in the classroom. Teachers reported using a variety of protocols and methods, incorporating student interest and technology, and providing various formal and informal feedbacks in their classrooms on a regular basis to motivate students to increase academic achievements after implementing EL.

A successful school reform movement includes altering a school system into becoming a multipurpose institution. Social groups in the past have demanded that public schools address weaknesses of families, churches, and the workplace by crying for reform measures to solve societal problems (Reese, 2007). Schools are responsible for providing a variety of services to help students grow emotionally, physically, and mentally. Teachers reported their schools provide parents with opportunities for additional assistance to attend to the needs of their students who are in need of English as a second language, BIST specialist, school counselors, Title One reading, and special

education support. Students are also involved in character education activities that include service learning projects both during the academic day and after school hours.

Successful school reform models focus on all elements of a school's environment including leadership and professional development to transform educators. To actively promote learning and collaboration about the practice of teaching, the organizational structures of professional development in a school must be created. (Darling-Hammond, 1995). Teachers reported that the leadership team is responsible for developing a school calendar for professional learning opportunities and dispersing information on school decisions to their grade or subject level after the implementation of EL. Most of the professional development opportunities were guided by EL practices and protocols according to the comments from the interviews. The Summer Institute and various off site trainings are the professional development opportunities widely attended by many of the teachers according to the responses on the paper pencil survey.

In the EL model, students are expected to be highly involved in designing their own learning, determining how to gain knowledge of the information, and assessing their progress (McKiernan, 1995). An expectation of EL schools is to change how students are taught and held accountable for their learning. EL schools are also expected to change how they provide professional development for educators. Students in EL schools are expected to be highly involved in their own learning, utilize personal experiences to promote self-discovery, assessing their progress, and character development. Expeditions, in-depth units of study, are how core curriculum is delivered to students using a variety of best practice protocols. Students should be grouped in structured groups when they are involved in an in-depth investigation of a single theme or topic

created for a particular purpose. According to the research on EL, schools should develop a strong sense of mission and purpose and transformed curriculum, instruction, and assessment in the classroom for successful implementation. Important changes in curriculum, instruction, assessment, and organization are revealed in a study. Studies also found that the EL model created a link between teacher learning and student learning.

The best teaching practices identified by EL lead to powerful learning, and help teachers apply and implement strategies in their classrooms (Sharpswain, 2005). The pencil/paper survey used in this study revealed that teachers believe they used a variety of EL protocols to motivate students to engage in learning. Some of the teachers stated the use of a variety of protocols including the using of authentic audiences in the final product, investigations with compelling real world topics, and incorporating the 10 design principles into lessons. Typically assigned tasks used during a unit of study on a regular basis were varied and course specific depending on the teaching assignment. A number of teachers referred to specific EL protocols that they frequently use in their classroom. Protocols mentioned included group activities such as think pair share, workshop model, creating graphic organizer anchor charts, partner writing assignments, and completion of a final product. Most of the teachers reported using assignments that addressed reading, writing, and problem solving skills as most commonly used in their classroom. Teachers reported using various formal and informal ways in which feedback was provided on student learning in their classroom on a regular basis. Almost all of the teachers reported organizing the students in their classroom in a variety of group configurations for instruction on a regular basis on the interview.

The Effective School movement was developed to aid schools in creating improvement plans for low functioning schools to increase student achievement by providing a guide to identify best practices in educating students. Characteristics of effective schools that were found to be important when creating an improvement plan including a strong administrative leadership focus on basic skills, high expectations for student success, frequent monitoring of student performance, and safe and orderly schools (Association for Effective Schools, 1996). Including these characteristics will improve student learning and should also be included in the implementation of a school reform model.

Examples of Effective Schools characteristics addressed in the study with the implementation of EL include focus on basic skills, high expectations for student success, frequent monitoring of student performance, and safe and orderly schools. According to the teacher comments in the interviews and pencil/paper survey changes have been in how basic skills are taught by using the mini lesson and workshop model protocols. Teachers and students set high expectations for student work through the use of experts and authentic audiences for their final projects were reported. Frequent formal and informal feedback is made available to students and parents according to the teachers. It was reported that parents have access to student grades online and teachers were available to answer question by phone or by email to discuss any concerns. Comments from teachers on both the interview and pencil/paper survey indicated that a system was already in place prior to the implementation of EL to address safe and orderly school. The majority of teachers did not indicate a need for change while others mentioned that

the use of EL protocols kept the students engaged in learning and decreased discipline problems within the classroom.

Several authors noted anticipated changes that should take place as a result of implementation of the EL model. Weinbaum's (1996) noted the following:

1. Students' learning and character development are both ranked at the top of what the school values.
2. Schools reorganizing time, space and relationships among persons and learning technology, and between the school and community maximize learning opportunities.
3. At critical transition points in their schooling, students must be held to high expectations and demonstrate proficiency in character development and academic achievement (p. 6).

The research data from the American Institute for Research indicated that EL schools provide professional development support. Based on this study, an expected change in teachers' perceptions of the level factors in this study would include an increase in professional development support. Expected changes in an EL school from the research conducted by the Academy for Educational Development include the developed of a strong sense of mission and purpose, transformed curriculum, instruction, and assessment in the classroom (Evidence of Success Expeditionary Learning in Year Eight, 2001).

A comprehensive two-year study for staff development programs conducted by National Staff Development Council (NSDC) provided expectations for an EL school to meet specific standards. To meet the expected standards of an EL school, changes in

practices would include setting a norm of continuous improvement, studying the change process, providing a framework for integrating innovations and relating those innovations to the mission of the organization, increasing administrator and teacher understanding of how to provide school environments and instruction that are responsive to the developmental needs of adolescents, and preparing teachers to use various types of performance assessment (Evidence of Success Expeditionary Learning in Year Eight, 2001, p. 12).

A study by the New American Schools found that successful design implementation of an EL school included five core elements of school transformation. Expected changes in an EL school after successful implementation would include:

1. Stable teams with the potential to grow and the ability to provide qualified personnel to serve schools.
2. Good initial selling to schools and the capability to convey their model well.
3. Effective initial advertising to the district and the capability to acquire the resource support required to successfully implement the model.
4. Importance given to the core elements of school transformation: curriculum, instruction, assessment, student grouping, and professional development.
5. Resources for implementation including whole-school training, facilitators, and common planning time (Evidence of Success Expeditionary Learning in Year Eight, 2001, p. 30).

Other anticipated changes from the review of literature included results similar to the research conducted in 1994 at the University of Colorado on the assessment of the initial phase on the precursor to EL (Evidence of Success Expeditionary Learning in Year

Eight, 2001). Findings from this report revealed that early EL implementation appeared to have a noticeable effect on students' attitudes about school, showed teachers new and innovative practices, and provided administrators with an opportunity to network with colleagues.

While the teachers in the online survey reported some perceptions of changes, the results of the ANOVA test did not show significant differences that were of interest in the context of this study between the answers given by the teachers on the 2005 and 2008 *WWIS* survey.

The examples of changes beginning to occur in the schools from the teacher interviews and pencil/paper survey as a result of the implementation of EL were consistent with the information in this study's review of literature. Responses from the teachers in the interviews and on the pencil/paper survey indicated that the EL model was practiced to some extent after one year of implementation. Some of the characteristics of the Effective Schools movement were mentioned as being in place according to the data from the teachers' perspectives in the interviews and pencil/paper survey. Changes in the schools from the implementation of EL indicated a successful school reform model is in place and should lead to an increase in student academic achievement. Quantitative data from the *WWIS* online survey did not provide information showing a significant change in teachers' perceptions of interest to study in the schools after one year of EL implementations.

Conclusions

Implications for Action

As school districts continue to look for ways to improve student achievement they often begin to search for reform models to implement that will increase high stakes test

scores. It is important for staff educators to know that implementation of a reform model is a slow process. Desired results may be come several years after the initial implementation of the school reform model. If teachers and school administrators are expecting dramatic changes after the first year of implementation, they might become discouraged and give up on the reform model. Having data to support that some changes in teachers' perceptions of school operations, student background, and teacher effectiveness level factors occurred after one year of implementation will help to continue the realization of the reform model. Hopefully, administrators and staff members will be less likely to become discouraged and dissatisfied with the EL model if they know that some change as occurred.

Schmoker (cited by Marzano, 2003) believes that first year results of a short-term view of a school reform model after implementation are vital in providing the groundwork for success on which to build (p.45). The results of the qualitative data did show some changes in perceptions of the three level factors occurring after implementation. Quantitative data did not show any statistically significant results that were of interest in the context of this study. If the *What Works In Schools: Translating Research into Action (WWIS)* online survey is used as a measure of successful implementation of EL, than plans must be made to insure that all factor levels are being addressed to facilitate positive changes in school culture. Marzano provides actions steps for each level factor to assist educators with ways to make positive changes in their school culture.

The leadership teams and teachers in each of the buildings should play a vital role in developing an improvement plans by using the data from this study and following the

action steps provided in *WWIS*. By developing genuine professional learning communities within each of the schools, a culture of inquiry and reflective practice by staff members will hopefully ultimate lead to the advancement of student achievement on state tests. Developing genuine professional learning communities does not necessarily require more money for professional development, but will require putting energy and support into fostering effective ways to advance student achievement. Teachers must take on a greater role in the leadership at the district and building level if changes are to occur. True teacher leadership roles and partnerships with administrators are needed to achieve the necessary bottom-up and top-down pressures to enhance professional learning communities.

An example of an improvement plan goal to address teacher concerns expressed on the pencil/paper survey about covering curriculum material taking additional time with the implementation of EL. Establishing a guaranteed and viable curriculum is a school operations level factor. The need to for additional time for teachers to cover essential curriculum material can be addressed by using an action step recommended in *WWIS*. Marzano (2003) recommends conducting a formal "time audit" to ensure that essential content can be covered within the available amount of time (p.29). To ensure that teachers have the maximum amount of time to cover the curriculum care must also be taken to protect the instructional time. The recommended action step by Marzano (2003) includes decreasing the amount of scheduled time not devoted to actual instruction (p.31). This means the leadership team could look at restructuring the daily schedule to efficiently use the amount of time spent available for classroom instruction. Time spent on lunches, recess, hall passing time, and announcements should be reduced to the bare

minimum to send the message that classroom instruction time is sacred and should not be interrupted.

Sustaining changes made after the initial implementation of EL will require the use of future data collections about the teachers' perceptions in each of the building. Leadership teams may want to continue using the paper/pencil survey at the end of each year to assess the changes that have made. Information from the future studies can be used to guide the continued development of improvement plans in each of the building. Updating improvement plans based on the data from the latest pencil/paper survey and adjustments in suggested action steps from *WWIS* for each of the level factors should be included in a new timelines for district and building continued implementation of EL. By focusing on activities and programs that address targeted needs identified by recently collected data, the revised improvement plan should result in continued increase in state test scores with a minimal amount of effort and money.

Recommendations for Future Research

The study revealed directions for potential future study. Continuation of the study after five years of implementation could be used to determine if any changes occurred in teachers' perceptions of school operations, student background, and teacher effectiveness level factors. This would add to the limited research on the implementation of EL. Tying student achievement to teachers' perceptions of school operations, student background, and teacher effectiveness level factors after the implementation of EL would be another possible future study. Future research could determine the significant difference between the factors at each of the three levels.

Another future study could be a qualitative-only model to follow one school as a case study might yield an expansion of information. A qualitative-only case study would allow the researcher to develop an in-depth study on the perspective of the teachers in one building. This study would also add to the research on EL as well as school reform and Effective Schools.

Concluding Remarks

Reform models often come with little supporting research other than that supplied by the model's creator and, therefore, there is a need for an objective study to provide educators with impartial data. The qualitative data revealed a better understanding of the impact of the implementation of EL on teachers' perceptions of school operations, student background, and teacher effectiveness level factors. Many teacher responses to questions on the interview and pencil/paper test indicated that EL practices were being implemented in their classroom and school. Quantitative data did show that some changes were made in teachers' perceptions, but those data were not statistically significant or of interest to the study and were not reported in the results.

Summary

Contained in Chapter One is an introduction to the problem statement and design components including background, significance, purpose statement, delimitations, assumptions, research questions, definition of terms, and overview of research methods information. Chapter Two is a relevant review of literature pertaining to the problem in this study is presented. In Chapter Three is the methodology and procedures used for data collection and analysis are contained. Described in Chapter Four are the descriptions and analysis of the data. Explained in Chapter Five are the summaries and findings,

which are discussed along with the supposition for practice, conclusions, and suggestions for future research.

References

Ahearn, E., & National Association of State Directors of Special Education, (1994, May 31). Involvement of Students with Disabilities in the New American Schools Development Corporation Projects. Project FORUM. (ERIC Document Reproduction Service No. ED371513) Retrieved May 2, 2009, from ERIC database.

American Institutes for Research, (1999, January 1). *An Educators' Guide to Schoolwide Reform*. (ERIC Document Reproduction Service No. ED460429) Retrieved May 3, 2009, from ERIC database.

Association for Effective Schools (1996). *What is effective schools research*? Retrieved April 19, 2009 from http://www.mes.org/esr.html.

Borman, G., Hewes, G., Overman, L., Brown, S., & Center for Research on the Education of Students Placed At Risk, (2002, November 1). Comprehensive School Reform and Student Achievement: A Meta-Analysis. (ERIC Document Reproduction Service No. ED472569). Retrieved July 16, 2009, from ERIC database.

Branch, Tamara Jeanine (2005). Leadership in middle school reform and its impact on students' academic performance: A case study. Ed.D. dissertation, University of Southern California, United States -- California. Retrieved February 21, 2009, from Dissertations & Theses: Full Text database. (Publication No. AAT 3196780).

Brooks, J.G. & Brooks, M.G. (1999). In search of understanding: The case for constructivist classrooms. Alexandria, VA: Association for Supervision and Curriculum Development.

Chesebro, J.W., Borisoff, D.J. (2007), "What makes qualitative research qualitative?" *Qualitative Research Reports in Communication*, Vol. 8 No.1, pp.3-14.

Daggett, Willard R. (2006). "Successful schools: from research to action plans." International Center for Leadership in Education. http://www.daggett.com/pdf/Successful%20Schools%206-05.pdf.

Dawson, Samantha Handley (1996). Practitioners' reflections on the design and implementation of learning expeditions. Ed.D. dissertation, The University of Memphis, United States -- Tennessee. Retrieved April 19, 2007, from Dissertations & Theses: Full Text database. (Publication No. AAT 9717221).

Expeditionary Learning Outward Bound design principles. Retrieved on January 9, 2008, from http://www.elschools.org/aboutus/principles.html.

Expeditionary Learning Outward Bound. (2003). *Expeditionary learning core practice benchmarks*. Retrieved from http://www.elschools.org/publications/CorePracticeBenchmarks.pdf.

Expeditionary Learning Outward Bound. (2001). Expeditionary Learning Outward Bound: Evidence of Success Expeditionary Learning in Year Eight. Cambridge, MA: Author.

Expeditionary Learning Schools Outward Bound overview and history. Retrieved on January 9, 2008, from http://www.elschools.org/aboutus/elhistory.html

Expeditionary Learning Schools Outward Bound what is els. Retrieved on December 1, 2007, from http://www.elschools.org.

Ferketich, S. (1990). Focus on psychometrics: Internal consistency estimates of reliability. *Research in Nursing and Health, 13*, 437-440.

Finnan, C. (2000, April 1). *Implementing school reform models: why is it so hard for some schools and easy for others?* (ERIC Document Reproduction Service No. ED446356). Retrieved July 16, 2009, from ERIC database.

Goals 2000: Educate America Act. Retrieved November 7, 2008, from http://www.ed.gov/G2K/g2k-fact.html.

Golafshani, N. (2003). Understanding Reliability and Validity in Qualitative Research.*The Qualitative Report, 8*(4), 597-607.

Graham, P.A. (2002, September). Educational reform—why now? *Proceedings of the American Philosophical Society 146*(3,) 256-263. Retrieved from http://www.aps-pub.com/proceedings/1463/302.pdf.

Darling-Hammond, L., & McLaughlin, M. (1995, April 1). Policies That Support Professional Development in an Era of Reform. *Phi Delta Kappan*, *76*(8), 597-604. (ERIC Document Reproduction Service No. EJ501259) Retrieved July 16, 2009, from ERIC database.

Hahn, Kurt. Retrieved on February 7, 2008, from http://www.kurthahn.org/.

Hein, G. (1999). The constructivists museum. In Greenhill, E. (Ed.), *The educational role of the museum* (pp. 73-79).

Hertling, E., & ERIC Clearinghouse on Educational Management, E. (2000, September 1). *Evaluating the Results of Whole-School Reform. ERIC Digest Number 140*. . (ERIC Document Reproduction Service No. ED446345) Retrieved May 2, 2009, from ERIC database.

Hunt, Christopher H. (2007). The impact of the Accountability Acts on student attendance in San Bernardino County, California. Ed.D. dissertation, University of La Verne, United States -- California. Retrieved May 22, 2009, from Dissertations & Theses: Full Text database. (Publication No. AAT 3290077).

Jorgensen, Margaret A. Ph.D. and Jenny Hoffman, "History of the No Child Left Behind Act of 2001 (NCLB)" *Assessment Report.* San Antonio: Harcourt Assessment, Inc, 2003. Available at http://harcourtassessment.com (accessed 2 March 2008).

Kasper, Beverly B (2005).Educational reform 1983 - 1994: New ideas or the rebirth of quintilian's ideologies? *American Educational History Journal*. *Vol. 32, Iss. 2,* [175-183].

Kennedy, M. (2007, June 1). The Reformers. *American School & University*, *79*(11), 18-20,. (ERIC Document Reproduction Service No. EJ774227) Retrieved May 1, 2009, from ERIC database.

Lindlof and Taylor, (1995) *Qualitative Communication Research Methods*. Second edition. 2002. Sage Publications. ISBN: 0-7619-2494-9.

Marzano, R., & Mid-Continent Research for Education and Learning (2001, April 1). *A New Era of School Reform: Going Where the Research Takes Us.* (ERIC Document Reproduction Service No. ED454255) Retrieved May 2, 2009, from ERIC database.

Marzano, R., & Association for Supervision and Curriculum Development (2003, January 1). *What Works in Schools: Translating Research into Action*. . (ERIC Document Reproduction Service No. ED474629) Retrieved May 2, 2009, from ERIC database.

Marzano, R. (2004) Validity and reliability report for snapshot survey of school effectiveness factors. Alexandria, VA: Association for Supervision and Curriculum Development.

McKiernan, R. (1995, January 1). The Influence of Expeditionary Learning in Outward Bound and College. (ERIC Document Reproduction Service No. ED398031) Retrieved May 2, 2009, from ERIC database.

McLagan, P. (1987, July). Who Can Plan? You Can! Training & Development Journal, 41(7), 26. Retrieved February 22, 2009, from Professional Development Collection database.

Muijs, D., & Sage Publications, T. (2004, January 1). Doing Quantitative Research in Education with SPSS. *SAGE Publications*, (ERIC Document Reproduction Service No. ED486690) Retrieved May 2, 2009, from ERIC database.

New York Outward Bound history and overview. Retrieved on March 14, 2008,http://nycoutwardbound.org/about/obhistory.html.

Outward Bound. (2009). *History*. Retrieved May 5, 2009, from: http://www.outwardbound.org/index.cfm/do/ind.about_history.

Paris, K. (1994). *A leadership model for planning and implementing change for school-to-work transition (pp. 22-25).* Madison, WI: University of Wisconsin-Madison, Center on Education and Work.

Parker, F. (1994, December 1). School Reform, 1744-1990s, Historical Perspective through Key Books and Reports. (ERIC Document Reproduction Service No. ED383595). Retrieved May 1, 2009, from ERIC database.

Quiambao, Joan E. (2004). An analysis and comparison of school culture with academic achievement of middle school students with specific learning disabilities. Ed.D. dissertation, University of Central Florida, United States -- Florida. Retrieved April 19, 2007, from Dissertations & Theses: Full Text database. (Publication No. AAT 3172945).

Reese, W. (2007, June 1). Why americans love to reform the public schools. *Educational Horizons*, *85*(4), 217-231. (ERIC Document Reproduction Service No. EJ772515). Retrieved May 1, 2009, from ERIC database.

Rugen, L., & Hartl, S. (1994, January 1). The lessons of learning expeditions. *Educational Leadership*, *52*(3), 20-23. (ERIC Document Reproduction Service No. EJ492906). Retrieved May 2, 2009, from ERIC database.

Sammons, P., Hillman, J. & Mortimore, P. (1995) *Key Characteristics of Effective Schools: A review of school effectiveness research.* A report by the Institute of Education for the Office for Standards in Education. London: OFSET.

Sammons, P., Hillman, J. & Mortimore, P. (1995) *Key Characteristics of Effective Schools: A review of school effectiveness research.* A report by the Institute of Education for the Office for Standards in Education. London: OFSET.

Sharpswain, Michelle (2005). Crew, not passengers: Expeditionary Learning and comprehensive school reform. Ph.D. dissertation, University of Denver, United States -- Colorado. Retrieved April 19, 2009, from Dissertations & Theses: Full Text database. (Publication No. AAT 3181836).

Strauss, A., & Corbin, J. (1990). *Basics of qualitative research: Grounded theory procedures and techniques*. Newbury Park, CA: Sage Publications, Inc.

Stringfield, S., Ross, S., Smith, L., & Center for Research on the Education of Students Placed At Risk, B. (1996, January 1). Bold plans for school restructuring: the new american schools designs. (ERIC Document Reproduction Service No. ED438132) Retrieved April 20, 2009, from ERIC database.

The Carnegie Foundation for the Advancement of Teaching. (2009). *Carnegie foundation history*. Retrieved May 3, 2009, from: http://www.carnegiefoundation.org/about/index.asp?key=13.

Thomas, J.W. (2000). *A review of research on project-based learning*. San Rafael, CA: Autodesk Foundation.

Thomas, R. M. (2003). Blending qualitative & quantitative research methods in theses and dissertations. Thousand Oaks, CA: Corwin Press.

Trochim, W.M.K. (2006). *The research methods knowledge base.* Retrieved June 14, 2009, from: http://www.socialresearchmethods.net/kb/qualval.php.

Tyack, D., & Cuban, L. (1995). *Tinkering toward utopia: A century of public school reform*. Cambridge, MA: Harvard University Press.

Ulichny, P. (2000). *Academic achievement in two expeditionary learning/outward bound demonstration schools*. Rhode Island: Providence.

Watras, J., & Midwest History of Education Society, C. (2001, January 1). American Educational History Journal, 2001. *American Educational History Journal, 28*. (ERIC Document Reproduction Service No. ED474155). Retrieved May 2, 2009, from ERIC database.

Weinbaum, A., Gregory, L., Wilkie, A., Hirsch, L., Fancsali, C., & Academy for Educational Development, I. (1996, January 1). Expeditionary Learning Outward Bound. Summary Report. (ERIC Document Reproduction Service No. ED462456). Retrieved May 2, 2009, from ERIC database.

Wenning, R., Herdman, P., Smith, N., McMahon, N., Washington, K., & ERIC Clearinghouse on Urban Education, (2003, August 1). *No Child Left Behind: Testing, Reporting, and Accountability. ERIC Digest*. (ERIC Document Reproduction Service No. ED480994). Retrieved May 1, 2009, from ERIC database.

Yilmaz, K. (2008, March 1). Constructivism: its theoretical underpinnings, variations, and implications for classroom instruction. *Educational Horizons*, *86*(3), 161-172. (ERIC Document Reproduction Service No. EJ798521). Retrieved May 1, 2009, from ERIC database.

Appendix A: Permission to Conduct the Study

From: VanMaren, Bob
Sent: Friday, June 29, 2007 9:16 AM
To: Wilhite, Kathi
Cc: Barta, Cindy
Subject:

To Whom It May Concern:

This letter is in reference to Cindy Barta and her work as a Doctoral Student at Baker University. Cindy has permission to use district data and to conduct her study in USD 204 Bonner Springs/Edwardsville School district. Please call if I may be of further assistance.

S
Dr. V

Dear Ms. Barta --

Your project (M-0042-0807-0817-G) has been reviewed and approved under the EXEMPT category of review. Until I can get a hardcopy letter to you, you may consider this email as evidence of IRB approval. You should expect the hardcopy letter within a week.

Sincerely,

m

Marc Carter, PhD
Chair, Baker IRB

"There is no power for change greater than a community discovering what it cares about."
--
Margaret Wheatley

Note: The official letter was not available. A Copy of Email received August 21, 2007.

To: Carmen Winnig; Mark W. Haystead
Subject: What Works Survey data

May 26, 2008

Dear Sir,

I am a doctorial student at Baker University in Kansas City. At the present time, I am working on a clinical research study (dissertation) on the effect of Expeditionary Learning (school reform model) on the staff's perception of school operations, teacher effectiveness, and student background factors in the elementary schools and middle school in USD 204 Bonner Springs Edwardsville Kansas School District. Data colleted at the present time for my study is limited to a teacher survey and interview questions I created based on What Works in Schools.

As a staff member of USD 204 Bonner Springs Edwardsville Kansas School District, I would like to include in the study the data collected from the two What Works in Schools surveys. One survey was taken prior to the implementation of Expeditionary Learning providing pre information for the study. The last survey was just recently completed which would supply post Expeditionary Learning implementation data. My advisors for the study and I believe using the data from the two What Works in Schools surveys conducted in the USD 204 Bonner Springs Edwardsville Kansas School District would add validity to my study.

To include the findings from What Works in Schools questionnaire in my study, I am in need of the raw data from the past two surveys. Without the raw data, the information from the What Works in Schools survey can only be used as descriptive information. I would appreciate any support that you can assist me with in obtaining the raw data from the surveys. Please advise me on the necessary steps I need to take to procure the raw data from the past two surveys.

Thank you for your support,
Cindi Barta

From: Robertjmarzano@aol.com [mailto:Robertjmarzano@aol.com]
Sent: Tuesday, May 27, 2008 10:47 AM
To: mhaystead@marzanoandassociates.com
Cc: Debbie Brown
Subject: Re: FW: What Works Survey data

Cindi

ASCD houses all the raw data. The person you should contact initially is Debbie Brown. She will be able to get you in touch with the tech people who can help you.

Sincerely

Bob Marzano
In a message dated 5/27/2008 8:32:06 A.M. Mountain Daylight Time,
mhaystead@marzanoandassociates.com writes:
Is there anyone at ASCD that I can put this person in contact with?

From: Jean Pride [mailto:jpride@ascd.org]
Sent: Wed 2/25/2009 3:11 PM
To: Cindi G. Barta
Cc: WEBHelp
Subject: RE: FW: What Works Survey data Bonner Springs Kansas

Cindi,

You have our approval to move forward with data collection as outlined below. Jack Xiao is not longer with ASCD. If you need another contact to help gather the information you need contact webhelp@ascd.org.

Jean

Appendix B: Interview Script and Questions

Interview Script

Good morning, afternoon
It is _____2008 and _Teacher__#_____
a_____ teacher at_____School. I am going to be recording our conversation today for research purposes. About 25 other teachers will be involved in the study. Your name will not be used and you will be identified only by a number. Any information from the interview will be kept confidential and no one will know your identify. Your responses will be part of a study about teacher's perceptions on the implementation of the EL program in your school. The recording of the interview will be destroyed once the study is complete. Do I have your permission to record the conversation? This is a copy of the questions I will be asking you to respond to about your impression of the first year of implementation of Expeditionary Learning. If you have any uncertainty about the questions, please don't hesitate to ask. Do you have any questions? The first set of questions is for collecting demographic information followed by the questions about EL.

1. Male Female
2. Education levels B M M+
3. Summer Institute Training 2007 Y N
4. Off Site Training Y N
5. Years of experience in education _____
6. Years of experience in USD 204 _____

Part II is the interview on questions relating to the implementation of EL on your school culture.

Interview Questions

1. How does your school guarantee that every child at your grade level receives the essential content of the written curriculum?

2. How does your school set challenging goals for the students and provide effective feedback?

3. How are parents and community members involved in the school?

4. What are the ways the school provides students with a safe and orderly environment?

5. How is the staff involved in professional development and decision making in the school?

6. How does the school provide for parents who want help in addressing the needs of their student?

.

7. What are some of the schoolwide programs students are involved in to increase learning?

8. What are some of the technique the school uses to motivate students to engage in learning?

9. When beginning of a unit in your classroom, describe the different types of instructional methods you use on a regular basis.

10. Describe the different types of tasks you assign in a unit of study in your classroom on a regular basis.

11. Describe how you organize the students in your classroom on a regular basis.

12. How do you provide feedback to student about their learning in your classroom on a regular basis?

13. How do you provide closure for student at the end of a unit in your classroom on a regular basis?

14. How do you manage student behavior in your classroom?

15. Tell me about the curriculum designing process used at your grade level? How do you identify what the students are expected to learn?

Appendix C: Staff Perception of School Operations, Student Background, and Teacher Effectiveness Factors Level Pencil/Paper Survey

Pencil/Paper Survey

Dear Fellow Educator,

I am currently a doctoral student at Baker University and have chosen to study the effect of the Expeditionary Learning (EL) model on the perceptions of elementary and middle school staff members of school operations, teacher effectiveness, and student background factors. This study is designed to assess what impact EL may have on the school environment. Your responses on a short survey will enable me to collect data on how the staff perceives the effect of EL. Participation is voluntary and responses will be kept confidential. No names will be used to protect your identity. Please take a few minutes to complete the short survey on your perceptions on this first year of implementation. Thank you in advance for you input.

Sincerely,
Cindi Barta

Please circle those which apply to you.										
Demographics	Male	Female				Level of Education	Bachelors	Masters	Masters +	
Summer Institute Training	Yes	No				Off Site EL Training	Yes	No		
Years Experience in Education										
1-3	4-8	9-13	14-18	19-23	24-28	29 +				
Years Experience in USD 204										
1-3	4-8	9-13	14-18	19-23	24-28	29 +				
Level of responsibility for instruction										
Administrator	Special Education Staff		Reading Teacher		Counselor		Media		Other	
PK	K	1st	2nd	3rd	4th	5th	6th	7th	8th	Electives

Staff Perception of School Operations, Teacher Effectiveness, and Student Background Factors
Survey

Questions	Yes	No	N/A
1. Has EL changed the delivery and the amount of time spent on curriculum? In what ways? Comments:			
2. Has EL changed the uses of goal setting and the utilization of data for feedback? Comments:			
3. Have the opportunities for parents and community members to become involved in the school operations changed with the implementation of EL? Comments:			
4. With the implementation of EL, has the way the school communicates and receives information from parents changed? Comments:			
5. Has the implementation of EL changed the student discipline system in the school? Comments:			

Questions	Yes	No	N/A
6. Have changes occurred in your classroom management since the implementation of EL? Comments:			
7. Has the designing of lesson plans changed since the implementation of EL? Comments:			
8. Has the ways the school provides training and support for parents changed since the implementation of EL? Comments:			
9. Has the quality of student experiences outside of the classroom increased since the implementation of EL? Comments:			
10. Has the way you motivate students to learn changed during the first year of implementation of EL? Comments:			

Appendix D: What Works in Schools Online Survey

What Works in Schools Online Survey

Print this copy of the survey if you would like to review the questions before taking the survey online.

Part 3: Survey	**Question 1:** To what extent do we engage in this behavior or address this issue?	**Question 2:** How much will a change in our practices on this item increase the academic achievement of our students?	**Question 3:** How much effort will it take to significantly change our practices regarding this issue?
TEACHERS IN MY SCHOOL . . .	Very few, if any, do this (1) 2 3 Almost everyone does this (4)	Not at all (1) 2 3 To a great extent (4)	Not much (1) 2 A lot, but possible (3) Too much to do (4)
Factor 1: Guaranteed and Viable Curriculum			
1. The content considered essential for all students to learn versus the content considered supplemental has been identified and communicated to teachers.	○ ○ ○ ○ 1 2 3 4	○ ○ ○ ○ 1 2 3 4	○ ○ ○ ○ 1 2 3 4
2. The amount of essential content that has been identified can be addressed in the instructional time available to teachers.	○ ○ ○ ○ 1 2 3 4	○ ○ ○ ○ 1 2 3 4	○ ○ ○ ○ 1 2 3 4
3. The essential content is organized and sequenced in a way that students have ample opportunity to learn it.	○ ○ ○ ○ 1 2 3 4	○ ○ ○ ○ 1 2 3 4	○ ○ ○ ○ 1 2 3 4
4. Someone checks to ensure that teachers address the essential content.	○ ○ ○ ○ 1 2 3 4	○ ○ ○ ○ 1 2 3 4	○ ○ ○ ○ 1 2 3 4
5. The instructional time available to teachers is protected by minimizing interruptions and scheduled noninstructional activities.	○ ○ ○ ○ 1 2 3 4	○ ○ ○ ○ 1 2 3 4	○ ○ ○ ○ 1 2 3 4
Factor 2: Challenging Goals and Effective Feedback			
6. An assessment system is used that provides for timely feedback (e.g., at least every nine weeks) on specific knowledge and skills for individual students.	○ ○ ○ ○ 1 2 3 4	○ ○ ○ ○ 1 2 3 4	○ ○ ○ ○ 1 2 3 4
7. Specific achievement goals are set for the school as a whole.	○ ○ ○ ○ 1 2 3 4	○ ○ ○ ○ 1 2 3 4	○ ○ ○ ○ 1 2 3 4

8. Specific achievement goals are set for individual students.	○ ○ ○ ○ 1 2 3 4	○ ○ ○ ○ 1 2 3 4	○ ○ ○ ○ 1 2 3 4
9. Performance on schoolwide and individual student goals is used to plan for future actions.	○ ○ ○ ○ 1 2 3 4	○ ○ ○ ○ 1 2 3 4	○ ○ ○ ○ 1 2 3 4
Factor 3: Parent and Community Involvement			
10. Effective vehicles are in place to communicate to parents and community.	○ ○ ○ ○ 1 2 3 4	○ ○ ○ ○ 1 2 3 4	○ ○ ○ ○ 1 2 3 4
11. Effective vehicles are in place for parents and community to communicate to the school.	○ ○ ○ ○ 1 2 3 4	○ ○ ○ ○ 1 2 3 4	○ ○ ○ ○ 1 2 3 4
12. Opportunities are provided for parents and community to be involved in the day-to-day operations of the school.	○ ○ ○ ○ 1 2 3 4	○ ○ ○ ○ 1 2 3 4	○ ○ ○ ○ 1 2 3 4
13. Vehicles are in place for parents and community to be involved in the governance of the school.	○ ○ ○ ○ 1 2 3 4	○ ○ ○ ○ 1 2 3 4	○ ○ ○ ○ 1 2 3 4
Factor 4: Safe and Orderly Environment			
14. The physical environment and school routines have been structured in such a way as to avoid chaos and promote good behavior.	○ ○ ○ ○ 1 2 3 4	○ ○ ○ ○ 1 2 3 4	○ ○ ○ ○ 1 2 3 4
15. Clear rules and procedures pertaining to schoolwide behavior have been established.	○ ○ ○ ○ 1 2 3 4	○ ○ ○ ○ 1 2 3 4	○ ○ ○ ○ 1 2 3 4
16. Appropriate consequences for violations of schoolwide rules and procedures have been established and implemented.	○ ○ ○ ○ 1 2 3 4	○ ○ ○ ○ 1 2 3 4	○ ○ ○ ○ 1 2 3 4
17. A program that teaches and reinforces student self-discipline and responsibility has been implemented.	○ ○ ○ ○ 1 2 3 4	○ ○ ○ ○ 1 2 3 4	○ ○ ○ ○ 1 2 3 4
18. A system for early detection of students who are prone to violence and extreme behavior has been implemented.	○ ○ ○ ○ 1 2 3 4	○ ○ ○ ○ 1 2 3 4	○ ○ ○ ○ 1 2 3 4
Factor 5: Collegiality and Professionalism			
19. Norms for conduct among professional staff and administrators that foster collegiality and professionalism have been established.	○ ○ ○ ○ 1 2 3 4	○ ○ ○ ○ 1 2 3 4	○ ○ ○ ○ 1 2 3 4
20. Governance structures that			

allow for teacher involvement in schoolwide decisions and policies have been established.	○ ○ ○ ○ 1 2 3 4	○ ○ ○ ○ 1 2 3 4	○ ○ ○ ○ 1 2 3 4
21. Teachers are engaged in staff development activities that address specific content area issues and allow for "hands-on" trial and evaluation of specific techniques.	○ ○ ○ ○ 1 2 3 4	○ ○ ○ ○ 1 2 3 4	○ ○ ○ ○ 1 2 3 4
Factor 6: Home Environment			
22. Training and support are provided to parents to enhance their communication with their children.	○ ○ ○ ○ 1 2 3 4	○ ○ ○ ○ 1 2 3 4	○ ○ ○ ○ 1 2 3 4
23. Training and support are provided to parents to enhance their supervision of their children.	○ ○ ○ ○ 1 2 3 4	○ ○ ○ ○ 1 2 3 4	○ ○ ○ ○ 1 2 3 4
24. Training and support are provided to parents to enhance their parenting style.	○ ○ ○ ○ 1 2 3 4	○ ○ ○ ○ 1 2 3 4	○ ○ ○ ○ 1 2 3 4
Factor 7: Learned Intelligence and Background Knowledge			
25. Students are involved in schoolwide programs that directly increase the number and quality of life experiences they have.	○ ○ ○ ○ 1 2 3 4	○ ○ ○ ○ 1 2 3 4	○ ○ ○ ○ 1 2 3 4
26. Students are involved in a schoolwide program of wide reading that emphasizes vocabulary development.	○ ○ ○ ○ 1 2 3 4	○ ○ ○ ○ 1 2 3 4	○ ○ ○ ○ 1 2 3 4
27. Students are involved in a schoolwide program of direct instruction in vocabulary terms and phrases that are important to specific subject matter content.	○ ○ ○ ○ 1 2 3 4	○ ○ ○ ○ 1 2 3 4	○ ○ ○ ○ 1 2 3 4
Factor 8: Student Motivation			
28. Students are provided with feedback on their knowledge gain.	○ ○ ○ ○ 1 2 3 4	○ ○ ○ ○ 1 2 3 4	○ ○ ○ ○ 1 2 3 4
29. Students are involved in simulation games and activities that are inherently engaging.	○ ○ ○ ○ 1 2 3 4	○ ○ ○ ○ 1 2 3 4	○ ○ ○ ○ 1 2 3 4
30. Students are provided with opportunities to construct and work on long-term projects of their own design.	○ ○ ○ ○ 1 2 3 4	○ ○ ○ ○ 1 2 3 4	○ ○ ○ ○ 1 2 3 4
31. Students are provided with training regarding the dynamics of motivation and how those dynamics affect them.	○ ○ ○ ○ 1 2 3 4	○ ○ ○ ○ 1 2 3 4	○ ○ ○ ○ 1 2 3 4

Factor 9: Instruction			
32. Begin their instructional units by presenting students with clear learning goals.	○ ○ ○ ○ 1 2 3 4	○ ○ ○ ○ 1 2 3 4	○ ○ ○ ○ 1 2 3 4
33. Begin their instructional units by asking students to identify personal learning goals that fit within the learning goals presented by the teacher.	○ ○ ○ ○ 1 2 3 4	○ ○ ○ ○ 1 2 3 4	○ ○ ○ ○ 1 2 3 4
34. Systematically provide students with specific feedback on the extent to which they are accomplishing the learning goals.	○ ○ ○ ○ 1 2 3 4	○ ○ ○ ○ 1 2 3 4	○ ○ ○ ○ 1 2 3 4
35. Systematically ask students to keep track of their own performance on the learning goals.	○ ○ ○ ○ 1 2 3 4	○ ○ ○ ○ 1 2 3 4	○ ○ ○ ○ 1 2 3 4
36. Systematically recognize students who are making observable progress toward the learning goals.	○ ○ ○ ○ 1 2 3 4	○ ○ ○ ○ 1 2 3 4	○ ○ ○ ○ 1 2 3 4
37. Systematically emphasize the importance of effort with students.	○ ○ ○ ○ 1 2 3 4	○ ○ ○ ○ 1 2 3 4	○ ○ ○ ○ 1 2 3 4
38. Organize students into groups based on their understanding of the content when appropriate.	○ ○ ○ ○ 1 2 3 4	○ ○ ○ ○ 1 2 3 4	○ ○ ○ ○ 1 2 3 4
39. Organize students into cooperative groups when appropriate.	○ ○ ○ ○ 1 2 3 4	○ ○ ○ ○ 1 2 3 4	○ ○ ○ ○ 1 2 3 4
40. Systematically provide specific feedback on the homework assigned to students.	○ ○ ○ ○ 1 2 3 4	○ ○ ○ ○ 1 2 3 4	○ ○ ○ ○ 1 2 3 4
41. End their units by providing students with clear feedback on the learning goals.	○ ○ ○ ○ 1 2 3 4	○ ○ ○ ○ 1 2 3 4	○ ○ ○ ○ 1 2 3 4
42. End their units by asking students to assess themselves relative to the learning goals.	○ ○ ○ ○ 1 2 3 4	○ ○ ○ ○ 1 2 3 4	○ ○ ○ ○ 1 2 3 4
43. End their units by recognizing and celebrating progress on the learning goals.	○ ○ ○ ○ 1 2 3 4	○ ○ ○ ○ 1 2 3 4	○ ○ ○ ○ 1 2 3 4
44. Prior to presenting new content, ask questions of students that help them recall what they might already know about the content.	○ ○ ○ ○ 1 2 3 4	○ ○ ○ ○ 1 2 3 4	○ ○ ○ ○ 1 2 3 4
45. Prior to presenting new	○ ○ ○ ○	○ ○ ○ ○	○ ○ ○ ○

content, provide students with direct links with what they have studied before.	1 2 3 4	1 2 3 4	1 2 3 4
46. Prior to presenting new content, provide ways for students to organize or think about the content (e.g., use advance organizers).	○ ○ ○ ○ 1 2 3 4	○ ○ ○ ○ 1 2 3 4	○ ○ ○ ○ 1 2 3 4
47. Ask students to construct verbal or written summaries of new content.	○ ○ ○ ○ 1 2 3 4	○ ○ ○ ○ 1 2 3 4	○ ○ ○ ○ 1 2 3 4
48. Ask students to take notes on new content.	○ ○ ○ ○ 1 2 3 4	○ ○ ○ ○ 1 2 3 4	○ ○ ○ ○ 1 2 3 4
49. Ask students to represent new content in nonlinguistic ways (e.g., mental image, picture, pictograph, graphic organizer, physical model, enactment).	○ ○ ○ ○ 1 2 3 4	○ ○ ○ ○ 1 2 3 4	○ ○ ○ ○ 1 2 3 4
50. Assign in-class and homework tasks that require students to practice important skills and procedures.	○ ○ ○ ○ 1 2 3 4	○ ○ ○ ○ 1 2 3 4	○ ○ ○ ○ 1 2 3 4
51. Ask students to revise and correct errors in their notes as a way of reviewing and revising content.	○ ○ ○ ○ 1 2 3 4	○ ○ ○ ○ 1 2 3 4	○ ○ ○ ○ 1 2 3 4
52. Ask students to revise and correct errors in their nonlinguistic representations as a way of reviewing and revising content.	○ ○ ○ ○ 1 2 3 4	○ ○ ○ ○ 1 2 3 4	○ ○ ○ ○ 1 2 3 4
53. Prescribe in-class and homework assignments that require students to compare and classify content.	○ ○ ○ ○ 1 2 3 4	○ ○ ○ ○ 1 2 3 4	○ ○ ○ ○ 1 2 3 4
54. Prescribe in-class and homework assignments that require students to construct metaphors and analogies.	○ ○ ○ ○ 1 2 3 4	○ ○ ○ ○ 1 2 3 4	○ ○ ○ ○ 1 2 3 4
55. Prescribe in-class activities and homework assignments that require students to generate and test hypotheses regarding content.	○ ○ ○ ○ 1 2 3 4	○ ○ ○ ○ 1 2 3 4	○ ○ ○ ○ 1 2 3 4
Factor 10: Classrooom Management			
56. Have comprehensive and well-articulated rules and procedures for general classroom behavior, beginning and ending the period or day, transitions and interruptions, use of materials and equipment, group work, and seatwork.	○ ○ ○ ○ 1 2 3 4	○ ○ ○ ○ 1 2 3 4	○ ○ ○ ○ 1 2 3 4

57. Utilize specific disciplinary strategies that reinforce appropriate behavior and provide consequences for inappropriate behavior.	○ ○ ○ ○ 1 2 3 4	○ ○ ○ ○ 1 2 3 4	○ ○ ○ ○ 1 2 3 4
58. Utilize specific strategies that instill a sense of confidence in students that they are receiving proper guidance and direction.	○ ○ ○ ○ 1 2 3 4	○ ○ ○ ○ 1 2 3 4	○ ○ ○ ○ 1 2 3 4
59. Utilize specific strategies that instill a sense of confidence in students that their concerns and wishes are being considered.	○ ○ ○ ○ 1 2 3 4	○ ○ ○ ○ 1 2 3 4	○ ○ ○ ○ 1 2 3 4
60. Use different strategies with different types of students to provide them with a sense of acceptance by the teacher.	○ ○ ○ ○ 1 2 3 4	○ ○ ○ ○ 1 2 3 4	○ ○ ○ ○ 1 2 3 4
61. Use specific techniques to keep aware of problems or potential problems in their classrooms.	○ ○ ○ ○ 1 2 3 4	○ ○ ○ ○ 1 2 3 4	○ ○ ○ ○ 1 2 3 4
62. Respond to inappropriate behaviors quickly and assertively.	○ ○ ○ ○ 1 2 3 4	○ ○ ○ ○ 1 2 3 4	○ ○ ○ ○ 1 2 3 4
63. Use specific techniques to maintain a healthy emotional objectivity when dealing with student misbehavior.	○ ○ ○ ○ 1 2 3 4	○ ○ ○ ○ 1 2 3 4	○ ○ ○ ○ 1 2 3 4
Factor 11: Classrooom Curriculum Design			
64. When planning units of instruction, identify specific types of knowledge that are important for students to learn (e.g., important categories of knowledge, examples, sequences, comparisons, cause-and-effect relationships, correlational relationships, facts, incidents, episodes, terms, skills, processes).	○ ○ ○ ○ 1 2 3 4	○ ○ ○ ○ 1 2 3 4	○ ○ ○ ○ 1 2 3 4
65. When planning units of instruction, ensure that students will have multiple exposures to new content presented in a variety of forms (e.g., stories, descriptions) using a variety of media (e.g., read about the content, watch a demonstration, listen to a presentation).	○ ○ ○ ○ 1 2 3 4	○ ○ ○ ○ 1 2 3 4	○ ○ ○ ○ 1 2 3 4
66. When planning units of instruction, make a clear distinction between skills and processes that are to be mastered versus skills and processes that are to be experienced but not mastered.	○ ○ ○ ○ 1 2 3 4	○ ○ ○ ○ 1 2 3 4	○ ○ ○ ○ 1 2 3 4

67. When planning units of instruction, organize examples into categories or groups that demonstrate the essential features of the content.	○ ○ ○ ○ 1 2 3 4	○ ○ ○ ○ 1 2 3 4	○ ○ ○ ○ 1 2 3 4
68. When planning units of instruction, ensure that students will be involved in complex projects that require them to address content in unique ways.	○ ○ ○ ○ 1 2 3 4	○ ○ ○ ○ 1 2 3 4	○ ○ ○ ○ 1 2 3 4

Appendix E: Data Tables

Table E1

The Main Effect for Time at the School Operation Level for Engaged

Year	Mean	Standard Error	n
2005	3.015	.046	91
2008	3.029	.050	75

Table E2

The Main Effect for the Factors at the School Operation Level for Engaged (n=166)

School Level	Mean	Standard Error
Guaranteed and Viable Curriculum	2.892	.034
Challenging Goals and Effective Feedback	3.122	.045
Parent and Community Involvement	2.966	.046
Safe and Orderly Environment	3.072	.058
Collegiality and Professionalism	3.06	.046

Table E3

Tukey's HSD (honestly significant difference) post hoc test for School Operations Level Factors

	Factors		2005 Guaranteed	Goals	Parent	Safe	Collegiality	2008 Guaranteed	Goals	Parent	Safe	Collegiality
		Means	2.94	3.17	2.98	3.01	2.98	2.85	3.07	2.95	3.14	3.14
2005	Guaranteed	2.94										
	Goals	3.17	0.23									
	Parent	2.98	0.04	0.20								
	Safe	3.01	0.07	0.16	0.03							
	Collegiality	2.98	0.04	0.19	0.00	0.03						
2008	Guaranteed	2.85	0.09	0.33	0.13	0.16	0.13					
	Goals	3.07	0.13	0.10	0.09	0.06	0.09	0.22				
	Parent	2.95	0.01	0.22	0.02	0.06	0.02	0.11	0.12			
	Safe	3.14	0.20	0.04	0.16	0.13	0.16	0.30	0.07	0.18		
	Collegiality	3.14	0.20	0.03	0.16	0.13	0.16	0.30	0.07	0.19	0.01	

Table E4

The Main Effect for Time at the Student Background Level for Engaged

Year	Mean	Standard Error	n
2005	2.448	.050	91
2008	2.477	.055	75

Table E5

The Main Effect for Factor at the Student Background Level for Engaged

Year	Mean	Standard Error	n
2005	2.448	.050	91
2008	2.477	.055	75

Table E6

The Interaction Effects for the Student Background Level Factors and Time for Engaged

Student Level	Home	Intelligence	Motivation
2005 (n=91)			
Mean	1.919	2.795	2.632
Standard Error	.065	.064	.060
2008			
Mean	1.88	2.849	2.703
Standard Error	.071	.071	.066

Table E7

The Main Effect for Time at the Teacher Effectiveness Level for Engaged

Year	Mean	Standard Error	n
2005	3.040	.048	91
2008	2.996	.053	75

Table E8

The Main Effect for Factors at the Teacher Effectiveness Level s for Engaged n=166

Teacher Level Engagement	Mean	Standard Error
Instruction	2.821	.036
Classroom Management	3.261	.046
Classroom Curriculum Design	2.973	.042

Table E9

The Interaction Effects for the Teacher Effectiveness Level Factors and Time for Engaged

Teacher Level	Instruction	Management	Design
2005 (n=91)			
Mean	2.84	3.263	3.018
Standard Error	.049	.062	.056
2008 (n=75)			
Mean	2.802	3.26	2.928
Standard Error	.054	.068	.062

Table E10

The Main Effect for Time at the School Operations Level for Change in Practice

Year	Mean	Standard Error	N
2005	2.720	.068	91
2008	2.607	.075	75

Table E11

The Main Effect for Factors at the School Operations Level for Change in Practice

School Level	Mean	Standard Error
Guaranteed and Viable Curriculum	2.784	.047
Challenging Goals and Effective Feedback	2.573	.059
Parent and Community Involvement	2.571	.059
Safe and Orderly Environment	2.763	.072
Collegiality and Professionalism	2.628	.065

Table E12

The Interaction Effects for the School Operations Level Factors and Time for Change in Practice

School Level	Guaranteed	Goals	Parent	Safe	Collegiality
2005 (n=91)					
Mean	2.848	2.632	2.569	2.857	2.696
Standard Error	.063	.080	.079	.097	.088
2008 (n=75)					
Mean	2.72	2.513	2.573	2.669	2.56
Standard Error	.069	.088	.087	.106	.096

Table E13

The Main Effect for Time at the Students Background Level for Change in Practice

Year	Mean	Standard Error	n
2005	2.990	.066	91
2008	2.891	.073	75

Table E14

The Main Effect for factors at the Students Background Level for Change in Practice

Student Level	Mean	Standard Error
Home Environment	3.059	.054
Learned Intelligence and Background Knowledge	2.935	.064
Student Motivation	2.828	.057

Table E15

The Interaction Effects for Student Background Level Factors and Time for Change in Practice

Student Level	Home	Intelligence	Motivation
2005 (n=91)			
Mean	3.077	3.029	2.863
Standard Error	.072	.085	.076
2008 (n=75)			
Mean	3.04	2.841	2.793
Standard Error	.079	.094	.084

Table E16

The Main Effect for Time at the Teacher Effectiveness Level for Change in Practice

Year	Mean	Standard Error	n
2005	2.901	.079	91
2008	2.746	.087	75

Table E17

The Main Effect for Factors at the Teacher Effectiveness Level for Change in Practice

Teacher Level	Mean	Standard Error
Instruction	2.800	.053
Classroom Management	2.820	.074
Classroom Curriculum Design	2.851	.063

Table E18

The Interaction Effects of the Teacher Effectiveness Level Factors and Time for Change in Practice

Teacher Level	Instruction	Management	Design
2005 (n=91)			
Mean	2.875	2.94	2.888
Standard Error	.071	.099	.085
2008 (n=75)			
Mean	2.725	2.701	2.813
Standard Error	.078	.109	.094

Table E19

The Main Effect for Time at the School Operations Level for Effort Needed

Year	Mean	Standard Error	n
2005	2.162	.054	91
2008	2.171	.060	75

Table E20

The Main Effect for Factors at the School Operations Level for Effort Needed

School Level	Mean	Standard Error
Guaranteed and Viable Curriculum	2.207	.045
Challenging Goals and Effective Feedback	2.184	.050
Parent and Community Involvement	2.256	.050
Safe and Orderly Environment	2.131	.058
Collegiality and Professionalism	2.054	.055

Table E21

The Interaction Effects of School Operations Level Factors and Time for Effort Needed

School Level	Guaranteed	Goals	Parent	Safe	Collegiality
2005 (n=91)					
Mean	2.226	2.165	2.275	2.097	2.047
Standard Error	.060	.067	.067	.078	.074
2008 (n=75)					
Mean	2.187	2.203	2.237	2.165	2.062
Standard Error	.066	.073	.074	.086	.081

Table E22

The Main Effect for Time at the Students Background Level for Effort Needed

Year	Mean	Standard Error	n
2005	2.463	.051	91
2008	2.531	.056	75

Table E23

The Main Effect for factors at the Students Background Level for Effort Needed

Student Level	Mean	Standard Error
Home Environment	2.791	.048
Learned Intelligence and Background Knowledge	2.329	.047
Student Motivation	2.372	.048

Table E24

The Interaction Effects for the Student Background Level Factors and Time for Effort Needed

Student Level	Home	Intelligence	Motivation
2005 (n=91)			
Mean	2.751	2.315	2.324
Standard Error	.065	.064	.064
2008 (n=75)			
Mean	2.831	2.342	2.42
Standard Error	.072	.070	.071

Table E25

The Main Effect for Time at the Teacher Effectiveness Level for Effort Needed

Year	Mean	Standard Error	n
2005	2.090	.060	91
2008	2.173	.066	75

Table E26

The Main Effect for factors at the Teacher Effectiveness Level for Effort Needed

Teacher Level	Mean	Standard Error
Instruction	2.086	.044
Classroom Management	2.022	.054
Classroom Curriculum Design	2.285	.051

Table E27

The Interaction Effects for Teacher Effectiveness Level Factors and Time for Effort Needed

Teacher Level	Instruction	Management	Design
2005 (n=91)			
Mean	2.032	2.011	2.226
Standard Error	.059	.072	.068
2008 (n=75)			
Mean	2.141	2.033	2.344
Standard Error	.065	.080	.075