

THE RELATIONSHIP AND DIFFERENCES BETWEEN
PARENT, STUDENT, AND TEACHER RESPONSES TO THE MISSOURI SCHOOL
IMPROVEMENT PROGRAM CYCLE THREE ADVANCED QUESTIONNAIRE
CLIMATE ITEMS AND STUDENT ACT PERFORMANCE

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Doctor of Education

by
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The undersigned, appointed by the dean of the Graduate School, have examined the dissertation entitled

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a candidate for the degree of doctor of education,

and hereby certify that in their opinion it is worthy of acceptance.

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Thank you Grant and Quin for all you do and for all that you mean to me. You are my world and my inspiration. It is my greatest joy in life to be able to call you my sons.

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PROGRAM CYCLE THREE ADVANCED QUESTIONNAIRE CLIMATE ITEMS
AND STUDENT ACT PERFORMANCE

Kyle Collins

Dr. Joyce Pivaler, Dissertation Supervisor

ABSTRACT

The problem under study was the lack of information regarding how student, teacher, and parent responses to the school climate portion of the Missouri School Improvement Program (MSIP) Advanced Questionnaire (AQ) are related to Missouri public high school student performance on the ACT. The population group was every Missouri public high school undergoing an MSIP accreditation review in 2004-2005.

The study was conducted by comparing each school's parent, teacher, and student responses to the MSIP climate portion of the AQ to the percentage of student ACT scores at or above the national average for that school. Additionally, a step-wise linear regression was conducted to determine which, if any group's responses were more closely related to ACT scores and which, if any of the AQ questions were more closely related to student performance on the ACT.

The study demonstrated that parent responses were most closely related to student ACT scores at or above the national average and a predictive model could be created based on parent perceptions of school climate. The information revealed valuable data for k-12 educators and policy makers regarding the importance of parent perceptions of school climate in relationship to student performance on the ACT.

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CHAPTER ONE

INTRODUCTION TO THE STUDY

The following study will illustrate and delve into the relationship between school climate and the performance on the ACT of Missouri public high school students from purposefully selected high school districts across the state of Missouri. School climate will be measured by the Missouri Advanced Questionnaire (AQ) portion of the Missouri School Improvement Program (MSIP) accreditation process of the high school districts selected for this study. This chapter provides background information, briefly describes the conceptual underpinnings for the study, addresses the purpose of the study, identifies the statement of the problem and research questions, outlines research hypotheses, limitations of the study, and defines key terms used in the study.

Background

ACT scores have been selected as the measure of student performance for this study for a number of reasons. ACT scores have been shown to have a high positive correlation to Missouri Assessment Program (MAP) scores (Monroe & Podgurski, 2005) which was, until 2008, the test given to Missouri students in grades three through eight, ten and eleven to measure the student achievement level for any given school. The ACT is nationally accepted for college admission and, in fact is required by more four year colleges than any other test (ACT Newsroom, 2009). The ACT is not an aptitude or

intelligence quotient (IQ) test, instead the questions are directly related to what students have learned in their high school English, mathematics and science courses (ACT Newsroom). ACT scores are closely tied to not only college applications but also a wide variety of scholarships and grants. Finally, the ACT was chosen as the appropriate measurement of student performance for this study because it has been accepted in all fifty states since 1960 as a high school student achievement and college placement exam (ACT Newsroom).

The MSIP AQ is a tool used by the Missouri Department of Elementary and Secondary Education (DESE) in the school accreditation process. It is a survey conducted by every school in the state of Missouri once every five years distributed to that district's parents, students, and faculty. It is a means of involving all stakeholders in the improvement process of the school (Patton, 1997). The survey assesses several aspects of the school district including; school climate, instructional programs and teacher effectiveness (Appendices W, X & Y). There are six questions related to school climate given to each of three groups; parents, students and faculty. The questions related to school climate on each of these separate surveys for the three groups were utilized to determine the relationship between Missouri public high school district climate and ACT scores of Missouri high school students for the purposes of this study.

Third cycle MSIP survey data for the year 2004-2005 was selected for this study because at the time of the study all Missouri public schools had completed third cycle MSIP. At the time of this study not all schools had completed fourth cycle MSIP, therefore a complete data set was not available. This researcher selected 2004-2005 third cycle MSIP schools to study instead of any other third cycle year data because his own

school was included in the data set and therefore the study results had even more meaning for the researcher.

Conceptual Underpinnings for the Study

The success or failure of a public school is based largely upon how the school is perceived by its constituents (Bolman & Deal, 1997). The constituents of a school include parents, community members, students and school personnel. All of the interactions among these groups and the perceptions they form help make up the climate of the school.

Research on school climate has its origins in the field of organizational climate research and school effects research (Anderson, 1982). Researchers of school climate have made the connection between climate and the personality of the school (Anderson; Bulach, Malone & Castleman, 1995; Hoyle, 1985). Just as an individual's personality is unique and developed by one's own life experiences and environment, the climate of a school has been described as multi-dimensional (Jones, 1991) and cultivated by all aspects of the social, psychological and physical environment of the school (Anderson, 1982; Haynes, 1998; Hoyle, 1985). Relationships are also important and often mentioned as a determining factor in defining school climate (Moos, 1974; Anderson, 1982; Haynes, 1998).

Student-Teacher Relationships

In the school setting there are a variety of important relationships that play an essential role in developing the climate of the school. One of these relationships is the student and teacher relationship. The number and quality of interactions between adults and students is a determining factor in establishing the climate of a school according to

Kuperminc, (2001). Other researchers have noted that there is nothing more important to school climate than teachers who are qualified and passionate and understand the importance of the relationship between good instruction and student learning (Haycock, 2001). Haycock and Esposito (1999) go so far as to say that the single most important climate factor in a school is teacher quality. Calabrese (1987) states that a positive social interaction between students and teachers is an important element of teacher effectiveness. This indicates that not only is a competent teacher with a high degree of efficacy critical, but they must also have the ability to interact in a positive social manner with students.

Parent-School Relationship

A second critical relationship is between the parents and the school. This relationship refers to, among other things, how involved the parent is with what happens with their child at school and how the parent perceives and interacts with school personnel. Haynes, Emmons and Ben-Avie (1997) and Sweeney (1988) suggest that the climate of a school is affected by interpersonal interactions among staff, between staff and students, among students and between home and school. These interactions influence children's cognitive, social and psychological development. So, not only are the personal interactions taking place at school during the school day essential, but the interaction between parents and the school are critical as well. Effective schools research (Matluck, 1987; Cruickshank, 1990; Bliss, 1991) identified many variables relevant to student achievement: orderly climate, leadership, high expectations, frequent monitoring of instruction, and parent and community involvement in instruction.

The MSIP AQ can give school leaders a standard by which to measure the quality of the relationships in their school. According to the research, strong positive

relationships should be an indicator of a positive school climate conducive to student learning (Matluck, 1987; Cruickshank, 1990; Bliss, 1991).

Statement of the Problem

The state of Missouri utilizes an accreditation system for its public schools which relies heavily on student performance measured by the Annual Performance Report (APR). In turn, the federal No Child Left Behind (NCLB) standard of adequate yearly progress is directly tied to student performance on several assessments including ACT scores. If a school district is failing to meet minimum standards of performance it could adversely affect their accreditation status and their ability to meet adequate yearly progress. This situation could create many problems for the district in terms of how they are perceived academically by their constituents as well as possible financial penalties in the form of lost funding from the federal government. It could also negatively impact the whole school district's reputation and ultimately the legitimacy of the school if the school went into academic failure or failed to be fully accredited.

The state of Missouri public school accreditation process includes an advanced questionnaire that consists of over forty survey questions using a Likert-type response scale that address various aspects of school functions. One of the sections addresses school climate. The school climate section consists of six questions related to student, faculty, and parent perceptions about the climate of their school. However, we do not know how the measures of Missouri public school district climate on the MSIP AQ are related to student achievement on the ACT test for public high school students in the state of Missouri.

Every public school district in the state of Missouri has access to the information found on the MSIP AQ that provides a detailed picture of the district. Still, not enough is known about the relationship between student, faculty, and parent perceptions of Missouri public school district climate and student performance as measured by ACT test results. There are no current studies which determine if responses on the school climate portion of the MSIP AQ have a relationship to Missouri public school district student performance on the ACT.

ACT scores are an important component of the accreditation process and they were chosen as the student performance measure for the purposes of this study instead of MAP scores for a number of reasons. First, ACT scores have a high degree of positive correlation to MAP scores (Monroe & Podgurski, 2005). Second, the MAP, which could have been used, is no longer given at the high school level and has been replaced with end of course testing beginning in the spring of 2008. Third, using the ACT is more appropriate since it is a curriculum based nationally accepted measure of student performance. Lastly, ACT scores are a good indication of whether students are meeting performance standards in the areas of language skills and math, two critical areas of student performance (Monroe & Podgurski).

There is evidence that organizational climate can have an impact on the performance of the organization, however, there is no specific information on the implications public school district climate has on ACT scores of Missouri public high school students. Although there are many connections between climate and performance found in the literature it is still unknown how student, faculty, and parent responses to the MSIP AQ may be related to student performance on ACT scores.

Purpose of the Study

All kindergarten through twelfth grade educators in the state of Missouri are continuously looking for ways to improve student academic performance and thereby legitimize their district's educational program. The purpose of this study is to investigate the relationship between school district climate as measured by the MSIP AQ and student performance as measured by the percentage of ACT scores at or above the national average.

This study will also attempt to construct a predictive model for Missouri public high school student ACT scores at or above the national average based on student, faculty and parent responses to the school climate portion of the MSIP AQ.

Research Questions

- a. What are the summary statistics for all variables under study; and by response group?
- b. Is there a relationship between Missouri public high school district student responses to the school climate portion of the MSIP AQ and Missouri public high school district ACT scores at or above the national average and if there is a relationship, what questions are more closely related to ACT scores at or above the national average?
- c. Is there a relationship between Missouri public high school district faculty responses to the school climate portion of the MSIP AQ and the percentage of Missouri public high school ACT scores at or above the national average and if there is a relationship, what questions are more closely related to ACT scores at or above the national average?

- d. Is there a relationship between Missouri public high school district parent responses to the school climate portion of the MISIP AQ and Missouri public high school district ACT scores at or above the national average and if there is a relationship, what questions are more closely related to ACT scores at or above the national average?
- e. Can a predictive model be constructed for Missouri public high school district student ACT scores at or above the national average based on Missouri public high school district student, faculty, and parent responses to school climate questions on the MSIP AQ?

Null Hypotheses

The study will test the following null hypotheses:

H0b. There is no relationship ($A \leq .10$) between Missouri public high school district student responses to the school climate portion of the MSIP AQ and Missouri public high school student ACT scores at or above the national average.

H0c. There is no relationship ($A \leq .10$) between Missouri public high school district faculty responses to the school climate portion of the MSIP AQ and Missouri public high school student ACT scores at or above the national average.

H0d. There is no a relationship ($A \leq .10$) between Missouri public high school district parent responses to the school climate portion of the MSIP AQ and Missouri public high school student ACT scores at or above the national average.

H0e. A predictive model cannot be constructed for Missouri public district high school student ACT scores at or above the national average, based on Missouri public

high school district student, faculty and parent responses to school climate questions on the MSIP AQ.

Missouri School Improvement Program Cycle and Review

Public schools in the state of Missouri have an accreditation evaluation every five years. This evaluation is conducted by the Missouri Department of Elementary and Secondary Education (DESE). Administrators, teachers and other stakeholders of the district collect data and report on all school programs through an electronic tool called the District Response to the Standards. In addition to this response to standards a team of evaluators selected by DESE make a visit to the school to interview teachers and observe the district's programs in action.

The MSIP accreditation review is weighted heavily on student performance measures. The measure of performance in the state of Missouri is based largely on student scores in various areas of performance including the mathematics and communication arts portion of the MAP and ACT. MAP and ACT scores are compiled annually on the school's Annual Performance Report (APR) along with eight other measures of performance that, when tabulated together amount to one hundred performance points out of which MAP and EOC scores account for forty five. Each of the five MAP performance areas and EOC areas are worth nine points. If the performance standard is met in any one area the district receives all nine points, if the performance standard is not met the district receives zero points. So, performing well on the MAP and EOC tests is essential and a constant concern for Missouri public schools and school administrators. The other nine measurements of performance include; ACT scores, dropout rates, average daily attendance (ADA), percentage of students enrolled in

advanced courses, percentage of students enrolled in vocational courses, percentage of credits earned in advanced and vocational courses combined, percentage of students placed in college, percentage of students placed vocationally, and percentage of students placed in college and vocationally combined. The process of school accreditation falls under the MSIP arm of DESE. There are three possible levels on which Missouri schools may be identified; accredited, provisionally accredited, and unaccredited. In order to be fully accredited in the state of Missouri each school must score at least one hundred six points out of one hundred forty nine points possible. A minimum of sixty-four of those points must come in the area of performance (DESE, 2005). The remaining forty-nine points are based on maintaining certain process standards established by DESE.

The third part of the MSIP evaluation review is a data collection instrument called the Advanced Questionnaire. This questionnaire is given to each school district during the semester prior to their scheduled review. The district distributes the questionnaire to students, faculty and parents in the manner that they deem most appropriate. Completed surveys are collected at the district offices and then sent via United States Postal Service back to DESE. School officials are not allowed to view the results of individual surveys before they are returned to DESE. The state compiles the data collected from the surveys and the aggregated results for each individual public school district are reported back to the district and published on the DESE website. The MSIP accreditation review team also uses the data collected from the survey to supplement their review by cross checking the data collected with the information gleaned from the district response to the standards and with the individual interviews they conduct on site. The aggregated archival data found on the MSIP AQ from the one hundred eight school districts going through third

cycle MSIP was retrieved for this study from the Missouri Department of Elementary and Secondary Education website.

Limitations of the Study

This study was limited in four ways. First, results were limited by the degree to which the school climate portion of the MSIP AQ is reliable and valid in terms of measuring student, faculty and parent perceptions of school climate. Secondly, because of self-reporting, results may also have been limited by the extent to which all participants answering the MSIP AQ understood the questions and to the extent to which they answered the questions honestly and accurately. Also, this study was limited in size and was not a blind, random study. Instead, it was limited to the number of Missouri public schools taking part in the 3rd Cycle MSIP accreditation process during the 2004-2005 school year.

Definitions of Key Terms

This study will require the use of a specific vocabulary. In order to clarify terminology, the following terms are defined.

ADA. Average Daily Attendance. Rate, in percentage, of daily attendance of high school students at a given attendance center.

ACT. American College Test. Test taken by high school students to determine likelihood of collegiate success. Most colleges use this or the SAT as one of the requirements for admittance.

APR. Annual Performance Report given each year to every public school in the state of Missouri and based on data submitted to the state on the school core data report.

AQ. Advanced Questionnaire. The survey tool given to all Missouri public schools once every five years to be distributed to their students, parents, faculty, and board of education.

AYP. Adequate Yearly Progress, a term coined in the language of the No Child Left Behind legislation that sets a percentage standard at which students of a particular state's schools must be at or above in order to be deemed to be making adequate progress in the areas of communication arts and math.

EOC. End Of Course testing that Missouri high school students will take in place of the MAP beginning in the year 2008-2009.

MAP. Missouri Assessment Program which is the state wide assessment given to all students of public schools in the state of Missouri in grades 3-8, 10 and 11 (prior to 2008) to assess student mastery of state determined benchmarks in math and communication arts. The MAP is an assessment that uses constructed response, multiple choice and performance event questions. The results of the MAP test are used as determining factors in both AYP and APR.

MSIP. Missouri School Improvement Program. This is a standard of processes and performance measures by which all public schools in the state of Missouri are evaluated.

NCLB. No Child Left Behind, federal legislation passed under the Bush administration in 2001 to hold public schools accountable for student performance in the areas of communication arts and math. All school districts are supposed to have students at grade level in both communication arts and math by the year 2014 or they may be

subject to penalties including, but not limited to, loss of federal funding, reorganization of the district and replacement of personnel.

Summary

Since the inception of No Child Left Behind in 2001, kindergarten through twelfth grade public school performance has come under increased scrutiny. Part of this scrutiny is focused on how well students are performing on standardized tests such as the ACT. Additionally, public school districts in the state of Missouri are required to assess student performance on a yearly basis and survey district stakeholders once every five years to find out how they perceive the district is performing. However, questions still exist about the relationship between student, faculty and parent perceptions of their school's climate and student performance scores on the ACT. Focused on public schools in the state of Missouri, this study seeks to inform administrators, teachers and public education policy makers in the state of Missouri the role school climate has in student performance scores on the ACT. Additionally, this study may provide some insight into practices that can positively affect overall school climate.

The remainder of this study is divided into chapters. Chapter two will provide a review of related literature. Chapter three will outline the study's design. Chapter four will expound the findings of the study. Finally, chapter five will address the conclusions of the study and make recommendations for future research.

CHAPTER TWO

REVIEW OF RELATED LITERATURE

No Child Left Behind (NCLB) legislation has significantly raised the stakes on public school performance for schools across the nation. Schools are now accountable, not only to their own state's department of education standards, but also to the Adequate Yearly Progress (AYP) provisions of the NCLB legislation. Each state is required to have a method by which they will determine progress and achievement levels of students in communication arts and math. In Missouri the measurement is the MAP test which was given annually from 2001 to 2008 to public school students in grades three through eighth, tenth grade and eleventh grade. There are four measurements of performance on the MAP; 1) Advanced, 2) Proficient, 3) Progressing, and 4) Below Basic. NCLB mandates that all students be proficient, or working at grade level, in both communication arts and math by the year 2014. In 2008-2009 Missouri replaced the MAP with End of Course (EOC) testing for high school students in Algebra I, English II, and Biology. Missouri continues to utilize the MAP test for student in grades three through eight.

Additionally, public schools in the state of Missouri have an accreditation evaluation every five years. A major component of this evaluation process is an assessment of how well the school's students are performing. The measure of performance in the state of Missouri is based largely on student's scores in various areas of performance. The mathematics and communication arts portion of the MAP, EOC and ACT. MAP, EOC and ACT scores are compiled annually on the school's Annual Performance Report (APR) along with eight other measures of performance. When tabulated together amount to one hundred performance points out of which MAP and

EOC scores account for forty five. Each of the five MAP performance areas and EOC areas are worth nine points. If the performance standard is met in any one area the district receives all nine points, if the performance standard is not met the district receives zero points. Performing well on the MAP and EOC tests is essential and a constant focus for Missouri public schools and school administrators. The other nine measurements of performance include; ACT scores, dropout rates, average daily attendance, percentage of students enrolled in advanced courses, percentage of students enrolled in vocational courses, percentage of credits earned in advanced and vocational courses combined, percentage of students placed in college, percentage of students placed vocationally, and percentage of students placed in college and vocationally combined.

The process of school accreditation falls under the MSIP arm of DESE. There are three possible levels on which Missouri schools may be identified; accredited, provisionally accredited, and unaccredited. In order to be fully accredited in the state of Missouri each school must score at least one hundred six points out of 149. A minimum of sixty-four of those points must come in the area of performance (DESE, 2005). The remaining forty-nine points are based on maintaining certain process standards established by the DESE (2005).

The MSIP review team utilizes the MSIP AQ report and a district response to the state standards that is compiled and electronically submitted to MSIP by the district under review prior to the team visit. During the team visit portion of the accreditation process the MSIP review team attempts to validate the responses found on the MSIP AQ data and in the response to the standards by interviewing personnel and reviewing district

documentation. The result is an accreditation evaluation that validates whether or not the district has met the required minimum standards established by DESE.

It is vitally important to every public school in the state of Missouri to become fully accredited, achieve AYP, and score well on their APR. According to Bolman and Deal (1997), maintaining legitimacy and support in the eyes of multiple constituencies is of critical importance. If a school is unaccredited or provisionally accredited it could lose much of its credibility and the confidence of its constituents. Likewise, if a school does not meet AYP and/or has a low APR they stand to lose not only the support of their constituents but also federal support of their programs in addition to other possible penalties outlined in NCLB. One of the penalties possible is being labeled as a school “in need of improvement”. Schools labeled “in need of improvement” are required to develop a specific school improvement plan which can be both expensive and time consuming. This situation could be problematic for the school and its leaders as they plan for the future since they may have trouble regaining their constituents’ confidence in their ability to provide rational solutions to the school’s perceived problems (Bolman & Deal, 2002; Yukl, 2002; Morgan, 1997).

The state of Missouri currently utilizes, as part of its public school accreditation process, a survey tool known as the MSIP AQ. The MSIP AQ contains a battery of questions, some of which are designed to ascertain the climate of a given school district. These questions are set up on a Likert-type scale and are distributed to every student, faculty member, and parent in the district.

The question that most school districts in the state of Missouri face is what to do with the results of the MSIP AQ? How can the results of the questionnaire be utilized to

improve the district and enhance student achievement? And, the question this study seeks to answer; how, if at all, does school climate effect student achievement? With the answers to these questions in hand, Missouri educators can develop strategies to improve the climate of their schools and thereby increase student achievement.

The demands placed on Missouri educators by the No Child Left Behind federal legislation necessitates informed decision making to maximize student achievement. The MSIP AQ provides us with a wealth of information that all districts could make use of if they had a framework for understanding and interpreting what, if any, relationship the data has to student achievement. Determining what relationship, if any, school climate has to student performance and what specific elements of a school's climate are more closely related to student achievement is therefore a worthy endeavor.

History of School Climate Research

The history of school climate research traces its roots to earlier studies of business organizations and universities (Anderson, 1982). The complexities of studying school climate is illustrated by Argyris (1958) who stated that studying human behavior in schools involves, "ordering and conceptualizing a buzzing confusion of simultaneously existing, multilevel, mutually interacting variables"(p. 501). With all of these variables to consider, researchers of school climate have taken a number of different approaches.

The Coleman (1966) report identified a student's socioeconomic status as the primary predictor of student achievement. It was soon followed by a host of research to refute that notion. Part of the research that emerged as a result of the Coleman report included investigations into effective schools research and the impact of school climate on student achievement (Bulach, Malone & Castleman, 1995). Much of the research was

designed to determine other possible predictors of student achievement rather than just the socioeconomic factors presented by Coleman. Among the critics of Coleman's report was Houlihan (1988) who said that, "Statistical data have been carried over to the ultimate silliness" (Houlihan, 1988, as cited in Bulach, Malone & Castleman, 1995).

It is easy to understand why educators sought to dispute Coleman's (1966) findings because to think that a student's achievement level is irrevocably tied to his socioeconomic status is demoralizing at best. Although problems in school climate are undeniable in urban, low-income districts and are concomitant with problems in student achievement and socialization, there have been studies to suggest that characteristics associated with a positive view of school such as student participation in and responsibility for the school life and a good relationship with teachers are important factors as well (Epstein, 1998; Kottkamp & Mulhern, 1987; Fraser, 1989; Terrell, 1994). Among the most important elements of developing a positive view of school and school life is the degree of trust and respect among students and teachers (Manning, 1996). Not surprisingly, respect and trust are two of the eight subscales in the School Climate Profile developed by Charles F. Ketterling a document closely related to the MSIP AQ, (Howard, Howell, & Brainard, 1987) the others being high morale, opportunity for input, continuous academic and social growth, cohesiveness, school renewal, and caring (Marshall, 2004).

Defining School Climate

There are many variances as to what defines school climate. Some believe that it is one's perception of the organization's psychological and institutional attributes which give the organization its' personality (Bulach Malone, & Castleman, 1995; Kratchowill,

2004). In order to measure these attributes in a given organization (Bulach, Malone, & Castleman) suggest using the following variables; order, leadership, involvement, instruction, expectations, environment and collaboration.

Sabo (1998) expresses that climate can be defined in terms of the pervasive quality of the school environment that effects the behavior of students and staff. According to Ben-Avie, Comer, & Haynes (1996), school climate is “the quality and consistency of interpersonal interactions within the school community that influences children’s cognitive, social and psychological development” (p. 322). Further evidence that school climate is affected by interpersonal interactions is offered by Deal and Kennedy (1982) who say that; the collective personality of a school or enterprise is based upon an atmosphere distinguished by the social and professional interaction of the individuals in the school.

Christenson and Lehr (2002) write that a school’s climate can be sensed as one enters the building. A sense of whether or not a school provides a positive learning environment that is disciplined, ordered, warm, friendly and safe is quickly ascertained. They go on to identify four sets of variables which must be measured to determine school climate. The first of these are ecology variables which they define as physical and material variables such as class size, cleanliness of the building, etc. The second set of variables is milieu variables such as student and teacher morale and number of years teaching for the average teacher. The third set of variables is labeled social system variables which are concerned with how teachers and students interact and how teachers and teachers interact, instructional programming, and shared decision making. The fourth set of variables are called culture variables, these variables are things such as norms and

belief systems, teacher commitment, level of cooperation, degree of expectations, consensus, consistency and clear goals (Christenson & Lehr, 2002).

Some have taken a broader view of what defines a school's climate. These researchers suggest that climate is everything that takes place in a school including leadership, classroom instruction and management, physical surroundings and the nature of individual value structures and relationships. (Anderson, 1982; Sabo, 1998).

Additional interpretations of school climate describe it as being a group phenomena centering on a consensus in perception and it concerns those aspects of the psychological, social and physical environment of the school that impact behavior. In short, it is the environment of the school as perceived by its students, staff and patrons, or, in other words, the school's personality (Hoyle, 1985). Perception of school climate is also central to Stronge and Jones (1991) argument that school climate is something that is intuitively understood but something for which there is no one accepted definition. Instead, it may be as simple as the perception of a safe and orderly environment. School climate, then, is recognized to consist of both subjective and objective indicators which give an overall feel for a school.

Other researchers have attempted to quantify the term school climate to a greater degree. Hoy and Tarter (1992) observed three different dimensions of what they termed organizational health. On the technical level are morale, cohesiveness and academic emphasis. Morale refers to the degree of trust, openness, friendliness and enthusiasm among the staff members. Cohesiveness is described as the extent to which the teachers and administration identify with each other and the school. The academic level has a set of variables including the amount of order and seriousness in the learning environment,

high expectations, respect from teacher to student and vice versa, and teachers' belief in their student's ability to do well.

The second tier is called the managerial level. Three of the four variables at this level refer to the school principal's behavior. These three include principal influence, consideration and initiating structure. The principal's influence is his ability to influence the actions of superiors (Hoy, Tarter & Kottkamp, 1991, as cited in Christenson & Lehr, 2002). Consideration is the establishment, on the part of the principal, of an atmosphere of collegiality, supportiveness, openness and friendliness. The third managerial level variable directly related to the principal is his ability to clearly establish and articulate standards of behavior that are task and achievement oriented. The fourth managerial level dimension is resource allocation.

The final level identified by Hoy, Tarter and Kottkamp (1991) is called the institutional level. This level is concerned with the manner in which the school is able to deal with its' environment and maintain the integrity of its educational programs. Recognizing that maintaining institutional integrity and credibility is vital for the survival of any organization (Bolman & Deal, 1997; Morgan, 1997).

Other researchers have defined school climate similarly. For instance, Moos (1974) identified three dimensions of climate: a) relationships, b) personal development, and c) system maintenance and change. The Organizational Climate Description Questionnaire (Dunn & Harris, 1998) noted the following factors influencing school climate; orderly climate, leadership, expectations, frequent monitoring of instruction and assessment, parent and community involvement and instruction. They did not include, however, physical attributes of school climate because they found little evidence to show

that they affect school climate. Conversely, the School Climate Survey developed by Kelley (Keefe & Kelley, 1985) recognized the importance of physical attributes in determining school climate. They recorded that school climate is comprehensively perceptions of the physical and psychological school environment, including relationships among and between administration, teachers, parents, students and the community at large: instructional and extracurricular management; the condition of the school building and grounds and the encouragement of the development of academic and social values among students (Keefe & Kelley, 1985).

Many of the authors use slightly different terminology and some stress the importance of physical attributes of a district while others do not. However, virtually all of the researchers on school climate have noted the importance of relationships, quality of teaching, leadership and constituent perceptions as vital to developing the school district's climate.

One of the most concise and user friendly definitions of school climate comes from the work of Bulach, Malone and Castleman (1995) who said school climate is, "the perception someone has about the psychological and institutional attributes of an organization or those psychological and institutional attributes which give an organization its personality" (p. 3). This definition is appropriate for studying school climate as it relates to student achievement for schools in Missouri because the measurement tool utilized, the AQ, is a survey that asks questions of several key stakeholders of the school community. The responses from these varied groups amount to their own personal perceptions of the climate of a particular school. The perception of a

student may be different from the perception of a parent and so on. Therefore, in many cases perception is just as important, if not more so, than objective reality.

School Climate and Student Achievement

There is an abundance of research that links the importance of school climate to student achievement (Agnew, 1981; Anderson, 1982; Brookover, 1978; Heck, 1990; Howe, 1985; Keefe & Kelley, 1985). There is also evidence to support that school climate can lead to academic success and personal growth (Marhsall, 2004). Sweeney (1988) summed up the importance of a positive school climate on the achievement of students by stating that “a winning school climate provides the very foundation for a sound educational program. When the climate is right, people are inspired to do their best. Teachers and students...do what needs to be done to stimulate learning and achievement generally rises (p. 1).” Frieberg (1998) offers that, “the interaction of various school and classroom climate factors can create a fabric of support that enables all members of the school community to teach and learn at optimum levels” (p. 22).

According to Christenson and Lehr (2002), “An improved climate provides the context in which effective teaching and learning can take root and bear fruit” (p. 10). Among the outcomes associated with school climate according to studies are student achievement, self-concept, rates of suspension, behavior and absenteeism (Anderson, 1982; Haynes, 1998). Esposito (1999) found that a positive school climate can have a positive effect on students academically even when such things as levels of family resources and maternal education are taken into account. She also found that the strongest influence on a child’s adjustment to school was the relationship between teachers and students. “A school’s climate is its atmosphere for learning. It includes the feelings

people have about the school and whether it is a place where learning can occur. A positive climate makes a school a place where both staff and students want to spend a substantial portion of their time: it is a good place to be” (Howard & Brainard, 1987, p.5).

Bulach, Malone and Castleman (1995) discovered a significant positive correlation between school climate and student achievement. They found that there was a significant relationship between student achievement and a student’s socioeconomic status. However, unlike Coleman (1966) they identified school climate to be a tool just as helpful as socioeconomic status in predicting student achievement. They also presented an optimistic view of schools with a majority of low socioeconomic status students by stating that even these schools are capable of having a positive school climate.

There has been widespread acknowledgement of the role that a school’s climate plays in the achievement of its students (Anderson, 1982; Lezotte, 1980) In general, student satisfaction with school may be regarded as being mainly dependent on personal characteristics such as sociability and positive values regarding academic achievement (Samdal, 1998). In order to develop a positive school climate the learning needs of students, not the organizational needs of the school must drive school operation (Berlin & Cienkus, 1989). Students need to feel they are treated fairly, they need to feel safe, and they need to perceive the teachers as supportive (Calabrese, 1987; Samdal, 1998). Other studies have reinforced the suggestion that characteristics associated with a positive view of school are student participation in and responsibility for the school life and a good relationship with teachers (Terrell, 1994; Epstein, 1998; Fraser, 1989; Kottkamp & Mulhern, 1987).

In summary, the various authors have identified several attributes of schools that can influence school climate and effect student achievement. Student's relationship with teachers appears to be one of the most influential elements in this association (Terrell, 1994; Calabrese, 1987; Epstein, 1981; Fraser 1989; Kottkamp & Mulhern, 1987). Students' perception of whether or not they are being treated fairly is another prevailing factor (Calabrese, 1987; Christenson, 2002; Samdal, 1998). School leadership and the perception by students, faculty, and patrons of a sense of fair play and justice are also critical factors influencing school climate and student achievement (Bulach, Malone & Castleman, 1995; Calabrese, 1987; Samdal, 1998). A somewhat harder to define variable is a general sense of caring that students, parents, teachers and administrators have for their school and each other (Berlin & Cienkus, 1989; Calabrese, 1987). There are other factors such as condition of facilities (Keefe & Kelley, 1985) and student and parent socioeconomic status (Bulach, Malone & Castleman, 1995; Coleman, 1966; Esposito, 1999) that figure in when determining school climate, although seemingly to a lesser degree.

The Role of the Principal in Influencing School Climate

Much of the literature regarding school climate mentions the importance of the role of school leaders, and in particular, the school principal in influencing climate (Bulach Malone & Castleman, 1995; Calabrese, 1987). Bolman and Deal (2002), equate the qualities of leadership with soul and spirit. They make the argument that there is no prescribed style, personality, gender or ethnicity requisite for leadership, instead they stressed the importance of faith, soul and spirit for an effective leader.

The principal is in a unique position in his or her school to influence the climate of their school through the formation of enduring relationships built on trust and integrity. The importance of forming positive relationships for creating a positive school climate is acknowledged by many of the authors (Terrell, 1994; Calabrese, 1987; Fraser, 1989; Kottkamp & Mulhern, 1987). The principal can be the beacon guide, lighting the way for the formation of positive relationships throughout the school by practicing courage, integrity, focus, passion, and wisdom through his or her leadership (Bolman & Deal, 2002).

The art of successful relational leadership of this nature involves the ability to empathize, and be compassionate (McCauley, Moxley, & Van Velsor, 2001). It also involves the creation of collaborative relationships in which consensus building, authorship and true caring, which is referred to as "...the social and ethical glue that holds any group or community together" (Bolman & Deal, 2002, p.6) are practiced. All of these elements are important for the school principal to consider as they attempt to create a positive climate in their school.

Summary

There has been much written about the effects of school climate on student achievement since the publishing of The Coleman Report in 1966. While some adhere to the theory that socio-economic status is the primary predictor of student performance (Coleman), others believe that factors such as relationships, empathy, caring, leadership, etc. (Terrell, 1994; Calabrese, 1987; Esposito, 1999; Fraser, 1989; Kottkamp & Mulhern, 1987) can have a strong cumulative effect on student performance. Studies focused on the questions of the impact of school climate on student academic performance have been

fairly consistent in the conclusion that school climate can have a positive impact on student academic achievement. However, other studies such as Coleman (1966) draw an undeniable link between socio-economic status and student academic achievement. One thing that appears to be evident throughout the research, however, is that when students have positive relations with their teachers and with school life in general it can have a positive impact on student academic performance.

CHAPTER 3

RESEARCH DESIGN AND METHODOLOGY

Research on school climate has been an ongoing concern since the Coleman report (1966) which concluded that the primary predictor of a student's academic success is their socio-economic status. Many researchers have since set out to demonstrate that other factors such as school climate can be of equal or greater importance in predicting student academic achievement (Terrel, 1994; Calabrese, 1987; Epstein, 1981; Fraser, 1989; Kottkamp & Mulhern, 1987). The school climate research has, in fact, shown that school climate is an important determinant of academic achievement and can be at least as important a predictor as socio-economic status (Agnew, 1981; Anderson, 1982; Brookover, 1978; Heck, 1990; Howe, 1985; Keefe & Kelley, 1985; Lezotte, 1980).

This study, using responses to the MSIP AQ and results from the nationally normed ACT will seek to determine which, if any, factors of school climate impact student achievement. It will also attempt to determine which, if any, factor of school climate is most predictive of student academic achievement on the ACT. The study will use the percentage of students for each school included in the study at or above the national average ACT score for the year 2004-2005. The national average composite ACT score for the year 2004-2005 was 20.9 (ACT Newsroom, 2009).

The following research questions will be addressed:

- a. What are the summary statistics for all variables under study; and by response group?
- b. Is there a relationship between Missouri public high school district student responses to the school climate portion of the MSIP AQ and Missouri public high

school district ACT scores at or above the national average and if there is a relationship, what questions are more closely related to ACT scores at or above the national average?

- c. Is there a relationship between Missouri public high school district faculty responses to the school climate portion of the MSIP AQ and the percentage of Missouri public high school ACT scores at or above the national average and if there is a relationship, what questions are more closely related to ACT scores at or above the national average?
- d. Is there a relationship between Missouri public high school district parent responses to the school climate portion of the MSIP AQ and Missouri public high school district ACT scores at or above the national average and if there is a relationship, what questions are more closely related to ACT scores at or above the national average?
- e. Can a predictive model be constructed for Missouri public high school district student ACT scores at or above the national average based on Missouri public high school district student, faculty, and parent responses to school climate questions on the MSIP AQ?

The following null hypotheses will be tested for the purposes of answering the listed research questions:

- a. H0b. There is no relationship ($A \leq .10$) between Missouri public high school district student responses to the school climate portion of the MSIP AQ and Missouri public high school student ACT scores at or above the national average.

- b. H0c. There is no relationship ($A \leq .10$) between Missouri public high school district faculty responses to the school climate portion of the MSIP AQ and Missouri public high school student ACT scores at or above the national average.
- c. H0d. There is no a relationship ($A \leq .10$) between Missouri public high school district parent responses to the school climate portion of the MSIP AQ and Missouri public high school student ACT scores at or above the national average.
- d. H0e. A predictive model cannot be constructed for Missouri public district high school student ACT scores at or above the national average, based on Missouri public high school district student, faculty and parent responses to school climate questions on the MSIP AQ.

Participants

All Missouri schools that participated in third cycle MSIP reviews during the 2004-2005 school were used. This representative population included ninety-eight Missouri public school districts that participated in the review process during the 2004-2005 school year (Appendices Q-V). The population was selected from the list of schools available from DESE based on the aforementioned criteria. Geographic diversity was ensured by the fact that the population represented all areas of the state including rural, urban and suburban.

Data Collection and Instrumentation

The MSIP AQ is a survey distributed to every public school in the state of Missouri once every five years in the semester prior to their Missouri School Improvement Review. Districts may, at their own discretion, administer the MSIP AQ at other times as well. The MSIP AQ consists of six different questionnaires uniquely

designed for the following audiences: 1) elementary students in grades 3-6, 2) Mid-level and Secondary students in grades 6-12, 3) Parents (one for each student), 4) Faculty, 5) Support staff, and 6) Members of the District's Board of Education. The surveys are administered and collected by the local district.

Most of the items reported in the MSIP AQ data are Likert Type Scale questions. There are five response alternatives to each question; strongly disagree, disagree, neutral, agree or strongly agree. These responses are, in turn, assigned a numerical value from one to five respectively. After the district collects all of the surveys they send them to DESE headquarters in Jefferson City, Missouri where the forms are then scanned using special equipment.

The number of respondents indicating they either agree or strongly agree with a question is combined into a single percentage along with the total number of responses to that particular question. Another approach used by the MSIP AQ is to use additive scales with questions that address similar aspects of similar topics such as school climate or teacher effectiveness. The advantage to this approach is that additive scales produce a higher degree of reliability than indicator constructs from single items. All of the additive scales used for the third cycle MSIP AQ have been determined to have a Chronbach's Alpha of .65 or higher (Chronbach, 1951). The mean value of each scale was reported along with the number of responses upon which it was based.

This study utilized six questions each from the MSIP AQ student survey, faculty survey, and parent survey. These questions are identical and are all related to the measurement of school climate. Therefore no additive scales were utilized. Instead, an analysis of each of the questions was made for the purpose of comparison and to

determine if one question from the surveys was more closely related to student achievement than the others.

The ACT is the instrument used in this study to measure student achievement. The ACT is designed to measure curriculum mastery and is not a measurement of intelligence quotient (IQ) or an aptitude test. It is directly related to what students have learned through their curriculum in the areas of English, mathematics and science. The ACT is a multiple choice based test with an optional writing population. The test is broken down into sections as follows; English- forty-five minutes, mathematics- sixty minutes, reading- thirty-five minutes, and science- thirty-five minutes. The highest possible score to be obtained on the ACT is a 36. In 2004-5 the national average composite ACT score was 20.9 (ACT Newsroom, 2009). This study was concerned with the average composite results on the ACT test of Missouri public high school students whose school's participated in the MSIP AQ during the 2004-2005 third cycle MSIP year.

A profile of every public school district in the state of Missouri is available on the DESE website. Included in the profile are the district's average composite ACT scores, including the percentage of the district's students whom have taken the test and the percentage of students scoring at or above the national average. Also available on the DESE website are the responses to every district's third cycle MSIP AQ responses. The data was collected for this study using information available publicly through the DESE website.

The other source of data for this study was each of the involved school district's APR, or Annual Performance Report, which gave the statistics related to ACT scores, and

dropout rates as well as several other statistical measures. Each school's percentage of ACT scores at or above the national average was then compared to each of the school's responses to the individual MSIP AQ climate questions. Each group's (students, faculty and parents) responses were also compared by question item to the percentage of ACT scores at or above the national average. As shown in figure 1, the focus of the study was school climate research to determine the relationship of each group's perception of school climate and student ACT scores. The data were collected into spreadsheets for analysis and a step-wise linear regression model was used to determine the relationship between each group's perception of school climate and student ACT scores. Every public school district's APR data is available online via the DESE website.

Summary

All Missouri school districts that have been through the MSIP third cycle review process in the year 2004-2005 were the focus of this study. The unit of analysis in the study was the percentage of ACT scores of students at or above the national average from each district during the year of their third cycle review. Each of the district's MSIP AQ data from the school climate section were used to determine the relationship between school climate and their student's percentage of ACT scores at or above the national average.

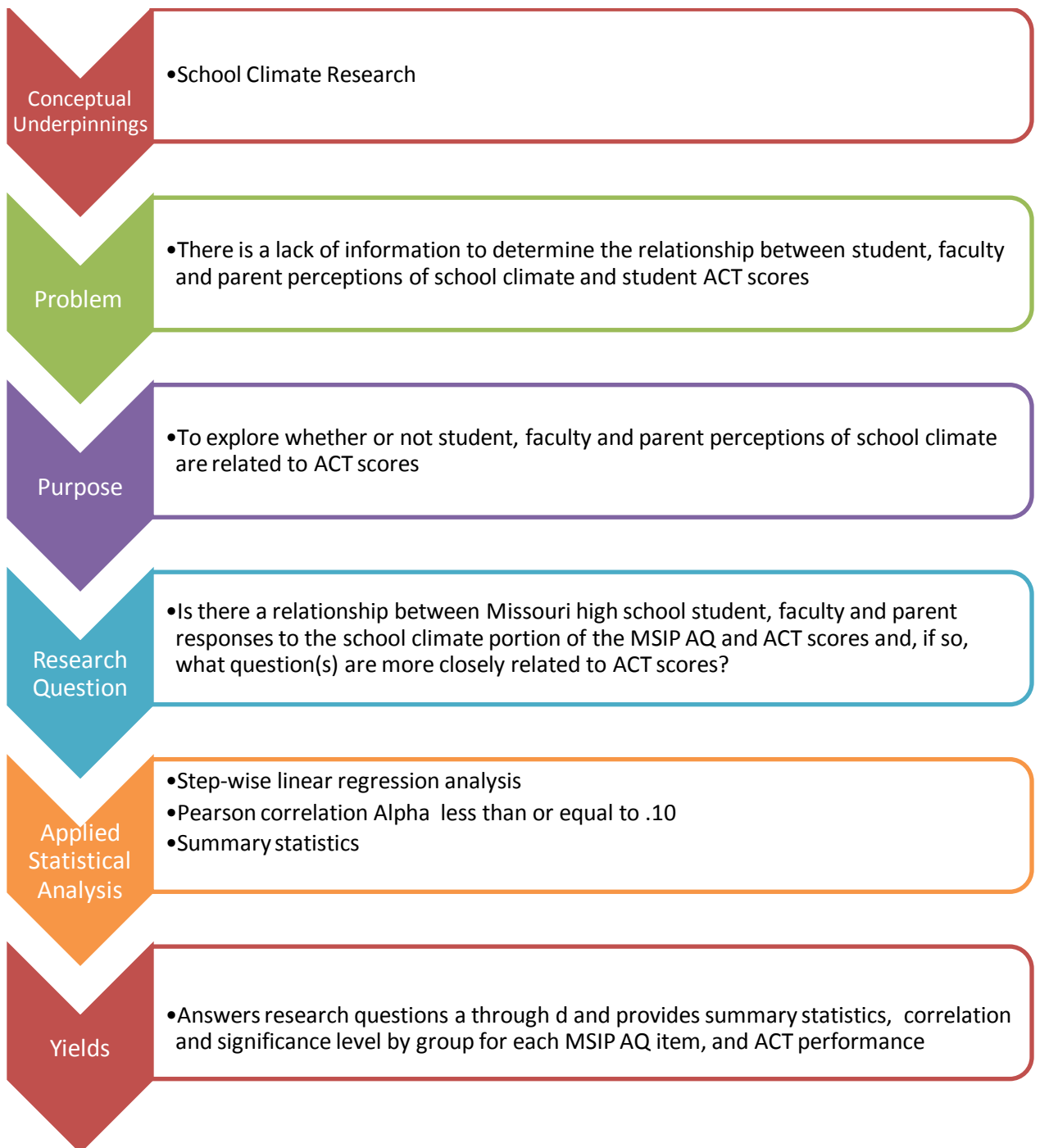


Figure 1. This graph is a conceptual representation of the research study.

CHAPTER FOUR

PRESENTATION AND ANALYSIS OF DATA

The purpose of this study was to investigate the relationship between school district climate as measured by the MSIP AQ and student performance as measured by the percentage of students scoring at or above the national average on the ACT. The ACT measures what students have learned throughout their high school years. The ACT is a critical test for high school students wishing to pursue a four year college degree and scholarship opportunities. Understanding what relationship school climate has to high school students in regard to their performance on the ACT will help inform high school educational leaders in making policy and professional staff development decisions on how best to affect school climate for the purpose of helping students become successful on the ACT. This chapter outlines the problem and purpose of the study, the design of the study, relevant findings, and finally, a summary of the chapter.

Problem and Purpose Overview

Understanding the relationship of school climate to student ACT scores will help high school educational leaders develop programs and methods to help high school students succeed. There was a lack of information as to what relationship school climate has to Missouri high school student ACT scores. By not clearly understanding the relationship school climate has to student ACT scores high school educational leaders may be missing out on opportunities to increase student achievement. There is research to support that school climate is linked to student achievement and that school climate can lead to academic success and personal growth (Agnew, 1981; Anderson, 1982; Brookover, 1978; Heck, 1990; Howe, 1985; Keefe & Kelley., 1985; Lezotte, 1980; Marshall, 2004). This study examined the perception of school climate by three groups; students, faculty and parents

in Missouri Public High Schools participating in the third cycle of the MSIP AQ in the year 2004-2005. These three groups' responses to the school climate measures regarding; safety, fairness, caring, belonging, discipline and respect were utilized to determine if there was a relationship between the student, faculty and parent perception to these measure of school climate and the percentage of 3rd Cycle MSIP high school student ACT scores at or above the national average and, if so, if there was a perception of one of those groups on one of the measures that was more closely related to those scores.

The purpose of this study was to investigate the relationship between the three groups; student, faculty and parent perception of school climate as recorded by the MSIP AQ and percentage of student ACT scores at or above the national average. The MSIP AQ has been administered once every five years to every public school in the state of Missouri since the inception of the MSIP in 1990. The MSIP AQ consists of a battery of questions regarding many aspects of Missouri Public Schools including a set of six questions found on each of the student, faculty and parent MSIP Aqs dealing with aspects of school climate.

Design of the Study

All Missouri school districts having gone through third cycle MSIP reviews during the 2004-2005 school year were used. This representative population included ninety-eight Missouri public schools that participated in the review process during the 2004-2005 school year. The population was selected from the list of schools available from the Missouri State Department of Elementary and Secondary Education based on the aforementioned criteria. Geographic diversity was ensured by the fact that the population represented all areas of the state including; rural, urban and suburban.

MSIP AQ and ACT data were retrieved from the publicly available DESE website section that deals with school data and statistics. As seen in Appendices Q through V, each individual school included in this study was researched to ascertain student, faculty and parent responses to the six questions dealing with the school climate measures of fairness, safety, caring, belonging, discipline, and respect. Each group's response to each of these questions was recorded by the researcher in a database. Group responses were calculated by adding the percentage that either agreed or strongly agreed with the MSIP AQ survey item to give an overall percentage. Data for the percentage of ACT scores at or above the national average was collected for each of the schools from the same website. The school's percentage of students that scored at or above the national average for that year on the ACT was used to measure performance on the ACT.

There were 120 school districts that went through the MSIP review process in 2004-2005. In this study nineteen school districts were excluded because they are kindergarten through eighth grade districts and therefore no ACT data was available. Two other school districts were excluded because there was no recorded ACT data available for them during the year of the study. One school district was excluded from this study because there was no MSIP AQ data available. The final study population included ninety-eight Missouri public school districts.

Data Analysis

Data were retrieved from the DESE website and evaluated by the researcher. An analysis of the data which were collected from the MSIP AQ of Missouri public school districts participating in MSIP cycle three in the year 2004-2005 and a description of the relationship between the percentage of Missouri public high school student ACT scores at

or above the national average for the participant schools and student, faculty and parent perceptions of school climate is presented (Appendix A). The sections of this chapter are: (a) description of the population and (b) analysis and findings organized by research questions. The purpose of this study was to add to the body of knowledge regarding the relationship between school climate as measured by the MSIP AQ and the percentage of Missouri public high school student ACT scores at or above the national average. This study investigated the relationship of school climate as measured by the MSIP AQ to the percentage of Missouri high school student ACT scores at or above the national average for the year 2004-2005.

The first part of this chapter contains a report of the correlations of student, faculty and parent perception of student climate on the percentage of ACT scores at or above the national average (Appendix B) followed by a description of the population. The description of the population was focused around a report of the frequency distribution of the variables. The description of the population also included a correlation matrix among all demographic variable combinations. Each significant correlation between variable pairs was discussed in regard to direction and relative strength.

The second part of the chapter presents the linear step-wise regression analysis to determine the extent, if any, that the variables played a role in explaining the percentage of ACT scores at or above the national average in the study. The data was analyzed to determine if there was a relationship between criterion variable (the percentage of Missouri high school student ACT scores at or above the national average) and predictor variables (student, faculty, and parent perceptions of safety, belonging, etc.). The

Statistical Package for the Social Sciences (SPSS) version 18.0 was used for all data analysis.

Description of Population

For this study, data from ninety-eight Missouri public high schools that completed third cycle MSIP reviews in 2004-2005 were utilized through the publicly available database in the Missouri DESE web-site regarding school data and statistics. Each of the participant school district's MSIP AQ data for the year 2004-2005 was studied in relation to student, faculty and parent responses to the sections of the MSIP AQ dealing with perceptions of safety, fairness, belonging, caring, discipline, and respect.

Analysis and Findings

The summary statistics and correlations measuring research questions *a* through *d* were organized into separate tables. Each table represents student, faculty and parent perceptions of one of the measures of school climate; safety, caring, belonging, fairness, discipline, and respect in relation to student scores at or above the national average on the ACT. Table 1 (Appendix E) measured the correlation value for the three study groups; students, faculty, and parents, and their perceptions of school safety to student ACT scores at or above the national average. Tables 2 through 6 reported the correlation value of the three study groups and their perceptions of; school belonging, teacher caring, students being treated fairly, discipline handled fairly, and students treated with respect, and the relationship between these perceptions and students scoring at or above the state average on the ACT. Tables one through six addressed research questions *a* through *d*.

Tables seven through twelve answered research question *e* and demonstrated whether a predictive model could be constructed for Missouri public high school district

student ACT scores at or above the national average based on Missouri public high school district student, faculty, and parent responses to school climate questions on the MISIP AQ. These tables were organized by MSIP AQ climate question item; safety, belonging, caring, fairness, discipline and respect. Each question item was measured by response group; student, faculty, and parent, to determine if a predictive model could be constructed for Missouri public high school district ACT scores based on each group's perception of the six variables; safety, belonging, caring, fairness, discipline, and respect.

The ninety-eight Missouri Public Schools participating in the study had a mean percentage of students scoring at or above the state level on the ACT of 30.8 percent with a standard deviation of 12.2.

Research Questions

- a. What are the summary statistics for all variables under study; and by response group?
- b. Is there a relationship between Missouri public high school district student responses to the school climate portion of the MSIP AQ and Missouri public high school district ACT scores at or above the national average and if there is a relationship, what questions are more closely related to ACT scores at or above the national average?
- c. Is there a relationship between Missouri public high school district faculty responses to the school climate portion of the MSIP AQ and the percentage of Missouri public high school ACT scores at or above the national average and if there is a relationship, what questions are more closely related to ACT scores at or above the national average?

- d. Is there a relationship between Missouri public high school district parent responses to the school climate portion of the MISIP AQ and Missouri public high school district ACT scores at or above the national average and if there is a relationship, what questions are more closely related to ACT scores at or above the national average?
- e. Can a predictive model be constructed for Missouri public high school district student ACT scores at or above the national average based on Missouri public high school district student, faculty, and parent responses to school climate questions on the MSIP AQ?

Correlation Data Summaries

Summary of Data: Safety. As shown in Table 1, Appendix E there were no statistically significant relationships between student, faculty, and parent perceptions of safety in their school and the percentage of students scoring at or above the national average on the ACT. The weakest relationship to student ACT scores was faculty perception of safety in the school. The resulting data showed less than a two percent correlative relationship between parent perceptions of school safety and student ACT scores. This relationship did meet the Alpha of equal to or less than .10, however, at Alpha= .093, it was not statistically significant to conclusively demonstrate a relationship between parent perception of school safety and student ACT scores at or above the national average. Therefore student, faculty and parent perceptions of safety were not considered to have a predictive value for student ACT scores at or above the national average.

The results for safety indicated that there was not a significant relationship between student, faculty or parent perceptions of safety in their school and student ACT scores at or above the national average. There could be many explanations for this, however, the evidence seemed to refute the assertion of some of the researchers (Stronge & Jones, 1991; Christenson & Lehr, 2002) that the perception of physical environment, order and safety are an important factor in school climate, which in turn can impact student achievement. This data would seem to indicate that student achievement, at least as measured by ACT scores, can be improved even in difficult physical conditions (Esposito, 1999). It also lends support to much of the research that non-physical factors such as relationships between and among a school's constituencies are a more important indicator of student achievement (Terrell, 1994; Calabrese, 1987; Fraser, 1989; Kottkamp & Mulhern, 1987).

Summary of Data: Belonging. In summary, Table 2 demonstrated evidence of a significant statistical relationship between parent perception of a school's sense of belonging for students and student ACT scores at or above the national average. There was no statistical significance between teacher or student perceptions of the sense of belonging at their school and student ACT scores at or above the national average.

The statistical relationship between the parent's perception of the sense of belonging at school to student ACT scores at or above the national average was quite strong at $p = .012$. The statistical relationship between student perceptions of the sense of belonging at their school and student ACT scores at or above the national average was almost a negative relationship.

The data results for belonging were a strong indication that parent perception of their child's sense of belonging in their school can be an important indicator of student achievement. Parents clearly want to see their children involved with positive aspects of school life. This probably demonstrates that parents want their children involved in activities such as athletics, forensics, band, art, etc. If they feel that their child's school is providing opportunities for positive involvement in these kinds of activities then their perception of their child's sense of belonging at the school will improve and it may have a positive relationship to their achievement. It is logical to assume that students who have a strong sense of belonging associated with their school will enjoy going to school more, attendance will improve, interest will increase and therefore should lead to higher achievement (Terrell, 1994; Epstein, 1998; Fraser, 1989; Kottkamp & Mulhern, 1987).

It is interesting to note that student's sense of belonging in their school did not have a significant relationship to ACT scores at or above the national average. The possible explanation for this is that the students may answer these questions with a negative response based on peer pressure, or the perception that it would not be "cool" to answer affirmatively when asked whether they have a sense of belonging with their school. It may be that students have a much different perspective than their parents of what constitutes a sense of belonging. They may be involved in positive activities within the school, but they may feel like they are pressured to be involved by their parents. For instance, a student whose parents insist that they be in the marching band, may not really want to be in the band. The parent in this set of circumstances would most likely be thankful that their child is involved in band and have a positive perception of the sense of belonging that their child has with the school. However, the student may not share this

positive sense of belonging, because they do not really want to be involved in this particular activity. The student would likely benefit from participation in the activity and their achievement may increase even though they are a less than willing participant (Epstein, 1998; Kottkamp & Mulhern, 1987; Fraser, 1989; Terrell, 1994). This is, of course, only one possibility and to find out how openly and honestly students answer these questions would require further study. However, it was clear that when parents have a positive perception of the sense of belonging in their child's school then student achievement in the form of ACT scores at or above the national average have a positive correlation.

Table 2.

Summary Statistical Analysis of Results for Parent, Faculty, and Student Perceptions of Belonging as Measured by the DESE AQ "There is a sense of belonging in this school"

N	Sources	Mean %	SD	Correlation	Significance
98	% of students at or above state average ACT	30.8	12.2	-	-
98	% Of parents agree	66.4	11.6	.252	.012*
98	% of students agree	54.5	9.3	.036	.728
98	% of faculty agree	87.1	10.0	-.093	.363

Note: Alpha \leq .10*

N=number of schools

Summary of Data: Caring. As shown in Table 3 there was a statistically significant relationship between parent perception of teachers who care in their child's school and ACT scores at or above the national average. There was no significant

statistical relationship to student and faculty perceptions of teachers who care in their school and student ACT scores at or above the national average.

The statistical significance of the perception of parents that teachers in their child's school care had a very strong relationship of $p = .003$ to student ACT scores at or above the national average.

The fact that parent perception of teachers who care had a positive relationship to student ACT scores at or above the national average should not come as a surprise. Parents trust the school with their most valuable resource, their children, for a large part of their lives. It is logical that parents place great value in having teachers that care since they will be spending such valuable and formative time with their children. The fact that student achievement rises when parents perceive that teachers care is also supported by much of the research (Epstein, 1998; Kottkamp & Mulhern, 1987; Fraser, 1989; Terrell, 1994) citing positive relationships between teachers and students as an important factor in school climate and student achievement.

Student perceptions of having teachers who care varied greatly from parent perceptions and had no significant relationship to student ACT scores at or above the national average. Once again, students may have a different perception of what constitutes caring than do parents. Teachers caring, to parents, may mean that teachers are holding their students accountable, making frequent contact to the home regarding student performance, and generally having high expectations for their students (Christenson & Lehr, 2002). This probably would not be appreciated by students as much as it is by parents and therefore may lead to negative responses from students even though the resulting outcome of such caring could be improved student performance.

Table 3.

Summary Statistical Analysis of Results for Parent, Faculty, and Student Perceptions of Caring as Measured by the DESE AQ “Teachers in this school really care”

N	Sources	Mean %	SD	Correlation	Significance
98	% of students at or above state average ACT	30.8	12.2	-	-
98	% Of parents agree	60.7	11.1	.299	.003*
98	% of students agree	45.9	9.6	-.061	.553
98	% of faculty agree	96.1	4.0	-.047	.646

Note: Alpha \leq .10*

N=number of schools

Summary of Data: Discipline. As shown in Table 4 there was a practical statistical significance between faculty and parent perceptions of whether discipline is handled fairly in their school and student ACT scores at or above the national average. They were both very close with parent perceptions of fair discipline slightly weaker at a significance of $p = .015$ to faculty with a significance of $p = .011$. Faculty perceptions of whether discipline is handled fairly showed a negative statistically significant relationship to student ACT scores at or above the national average.

There was no statistical significance between student perceptions of discipline being handled fairly in their school and student ACT scores at or above the national average.

Similarly to the perception of caring, fair discipline was an important indicator of student achievement when it comes to parent perceptions (Bulach, Malone & Castleman, 1995; Calabrese, 1987; Samdal, 1998). Parent and student perceptions of what constitutes

fair discipline are probably at opposite ends of the spectrum. Discipline often has a negative connotation for students and it would be hard for them to be objective about what is fair discipline. Parents would probably have a more objective view of what constitutes fair discipline and they likely are more interested that discipline is applied evenly and consistently even if their child is sometimes held accountable. This would help to explain why there was a relationship between parent perceptions of fair discipline and there was not a relationship between student perceptions of fair discipline and student achievement scores on the ACT. Students may themselves have been or have peers whom have been subject to disciplinary procedures that, even if applied fairly and consistently, may skew their perception of how discipline is handled in the school.

Table 4.
Summary Statistical Analysis of Results for Parent, Faculty, and Student Perceptions of Discipline as Measured by the DESE AQ “Discipline in this school is handled fairly”

N=	Sources	Mean %	SD	Correlation	Significance
98	% of students at or above state average ACT	30.8	12.2	-	-
98	% Of parents agree	54.9	11.2	.219	.015*
98	% of students agree	47.7	13.2	.016	.439
98	% of faculty agree	82.3	13.5	-.231	.011*

Note: Alpha \leq .10*
 N=number of schools

Summary of Data: Fairness. Table 5 demonstrates that parent perception that their child is treated fairly at school had a very strong statistical relationship to student ACT

scores at or above the national average. This significance was at the $p = .000$ level which indicated a statistically practical significant correlation.

There was no statistically significant relationship between student and faculty perceptions of students receiving fair treatment at school and ACT scores at or above the national average.

Fairness is a subjective concept much like the perception of discipline. The fact that parent perceptions of fairness show such a high level of significance to student achievement on the ACT in this study demonstrates that it is a very important concept to them (Calabrese, 1987; Samdal, 1998). Again, parent perceptions of what is fair differed from student perceptions. Similar to the findings with discipline and teacher caring, it was not surprising that parent perceptions of fairness are related to ACT scores while student perceptions of fairness were not. To parents fairness probably means accountability and consistency while students may perceive certain accountability and consistency measures to be unfair. For instance, how many times has a teacher or an administrator heard a student lament; “this isn’t fair”? It happens all the time. Student concepts of fairness can be much more subjective. For example, an English teacher assigning a twenty page research paper complete with standardized citations and at least ten resources may not seem “fair” to students. However, parents probably would view this as not only fair, but also an excellent opportunity to develop important research and writing skills. The parents’ main concern is likely to be that their child is held to the same standard as every other child while the students’ main concern is likely to be the fact that they have to do the assignment at all.

Table 5.
Summary Statistical Analysis of Results for Parent, Faculty, and Student Perceptions of Fairness as Measured by the DESE AQ “Children are treated fairly at school”

N	Sources	Mean %	SD	Correlation	Significance
98	% of students at or above state average ACT	30.8	12.2	-	-
98	% Of parents agree	72.0	9.6	.383	.000*
98	% of students agree	59.7	9.2	.077	.226
98	% of faculty agree	86.9	10.1	-.125	.109

Note: Alpha \leq .10
 N=number of schools

Summary of Data: Respect. In summary, Table 6, demonstrated that parent perceptions that their child is being treated with respect at school had a high correlation to student ACT scores at or above the national average. This significance was at the $p = .000$ level which indicated a direct, strong relationship.

There was no statistical significance to faculty or student perceptions of students being treated with respect and student ACT scores at or above the national average.

Respect is an important concept to adults and students alike. Once again, as with many of these measurements of climate, respect is subjective and is going to have different interpretations among the various groups. It is not surprising that parents want their children to be treated with respect (Matluck, 1987; Cruickshank, 1990; Bliss, 1991). It is also not surprising that the more they perceived that their child was being treated with respect the higher student achievement on the ACT became. Students, on the other hand, are likely to view respect in a different way. The fact that they are not yet adults

and therefore are not making many of their own decisions and are subject to various rules and regulations due to their status as minors may have an impact on the degree to which they perceive they are being treated with respect.

Table 6.
Summary Statistical Analysis of Results for Parent, Faculty, and Student Perceptions of Respect as Measured by the DESE AQ “Children are treated with respect at school”

N	Sources	Mean %	SD	Correlation	Significance
98	% of students at or above state average	30.8	12.2	-	-
98	ACT	67.5	10.0	.385	.000*
98	% Of parents agree	60.3	9.8	.053	.304
98	% of students agree	94.8	5.9	-.018	.432
98	% of faculty agree				

Note: Alpha \leq .10*
 N=number of school

Summary of Correlation Data

As shown in Table 7, student perceptions of school climate demonstrated no significant statistical relationship to student ACT scores at or above the national level with none of the six measures of student perception of school climate showing a statistical relationship to student ACT scores at or above the national level.

Faculty perceptions of school climate had only one area that demonstrated a practical, significant relationship to student ACT scores at or above the national average. Faculty perception of how student discipline was handled had a practical, statistical relationship, $p = .011$, to student ACT scores, although they were negatively related to

student ACT scores. No other faculty perceptions of school climate proved to have a statistical relationship to student ACT scores at or above the national level.

Interestingly, parent perceptions of school climate were more closely related to student scores at or above the national average on the ACT than either student or faculty perceptions of school climate. All six areas of school climate as perceived by parents; safety, caring, belonging, fairness, discipline, and respect, were shown to have a statistical relationship to student ACT scores at or above the national average.

Parent perceptions of their child being treated with respect and being treated fairly at school had a very high practical relationship to student ACT scores at or above the national level with a significance level of $p = .000$. There was also a practical statistical relationship between parent perceptions of teachers caring, $p = .003$, discipline being handled fairly, $p = .015$, and a sense of belonging at their child's school, $\text{Alpha} = .012$, to student ACT scores at or above the national level. Parent perception of a sense of safety at their child's school also had a statistical relationship to student ACT scores, $p = .093$, at or above the national average, although the relationship was not strong enough to show a practical significant relationship.

In all, parent perceptions of school climate were the only group of the three that had a clear statistically significant relationship to student ACT scores at or above the national average. Parent perceptions of their child being treated fairly and with respect showed the strongest degree of statistical significance in relationship to student ACT scores at or above the national average with a $p = .000$.

Throughout all of the data, faculty perceptions had very little relationship to students scoring at or above the national average on the ACT. The reason for this is that

faculty responses to the AQ items were overwhelmingly positive and therefore were largely insignificant for the purposes of this study.

Table 7.
Summary of Significance of Correlation Data

Construct	Student	Faculty	Parent
Safety	.236	.348	.093*
Caring	.553	.646	.003*
Fairness	.226	.109	.000*
Belonging	.728	.363	.012*
Discipline	.439	.011*	.015*
Respect	.304	.432	.000*

Alpha \leq .10*

Regression Analysis

This next section focuses on whether or not predictive models (Appendices C & D) could be created for students, faculty and parent perceptions of school climate in relationship to student ACT scores at or above the national average based on each group's perception of safety, caring, fairness, belonging, discipline and respect (Appendices K-P).

Summary of Regression: Parents As shown in Table 13, the predictive power of parent perception of school climate was the strongest of the three groups with parent perception of their child being treated fairly at school the strongest of the six areas of school climate studied. The next strongest predictor of parent perception of school climate on student ACT scores at or above the national average was their child being treated with respect at school, followed by their perception that teachers in their child's school care, their perception that there is a sense of belonging in their child's school, and finally, their perception of discipline being handled fairly in their child's school. There was no predictive model that could be constructed for parent perceptions of safety at their child's school.

Table 13.

Summary of Regression Model for Parent Perceptions of School Climate and Percentage of Student ACT Scores at or Above the National Average

Climate Item	Coefficient	R2	SEE	Durbin-Watson	Significance
Fairness	.61	.217	.122	1.87	.000*
Respect	.533	.161	.126	1.86	.000*
Caring	.39	.12	.112	1.81	.001*
Belonging	.33	.10	.108	1.76	.003*
Discipline	.274	.12	.110	1.72	.011*
Safety	.17	.02	.130	1.73	.185

Note: Alpha \leq .10*

Summary of Regression: Students There was only one very weak model for predicting ACT scores at or above the national level for student perceptions of school climate. As shown in Table 14., student perception of teachers that care in their school had a significant relationship although it was a negative relationship indicating that the greater percentage of students agreeing with the statement that their teachers care will correlate to a lower percentage of students scoring at or above the national average on the ACT.

There was no statistically significant predictive model that could be created for the percentage of student ACT scores at or above the national level and student perceptions of school climate.

Table 14.

Summary of Regression Model for Student Perceptions of School Climate and Percentage of Student ACT Scores at or Above the National Level

Climate Item	Co-efficient	R2	SEE	Durbin-Watson	Significance
Caring	-.23	.118	.129	1.81	.083*
Fairness	-.070	.217			.500
Respect	-.155	.161			.545
Belonging	-.09	.10			.548
Discipline	.030	.115			.783
Safety	.001	.018			.995

Note: Alpha \leq .10*

Summary of Regression: Faculty As illustrated in Table 15, there were two practical statistically significant predictive models that could be constructed for faculty perception of school climate and student ACT scores at or above the national average. First, faculty perceptions of students being treated fairly at school had a negative predictive value on student ACT scores at or above the national level. The higher the percentage of faculty agreeing with the statement that students are treated fairly at school, the lower the percentage of student ACT scores at or above the national average. Second, faculty perception of discipline being handled fairly in the school had a negative predictive value on student ACT scores at or above the national average. The greater the percentage of faculty agreeing with the statement that discipline is handled fairly in their school the lower the percentage of students scoring at or above the national average on the ACT.

The other model for faculty perceptions of school climate that had a statistical predictive significance to student ACT scores, although it was not a practical significance, was the faculty's perception of sense of belonging at the school. It also had a negative relationship to student ACT scores in that the greater the percentage of faculty agreeing there is a sense of belonging at the school then the lower the percentage of students scoring at or above the national average on the ACT will be.

No predictive model for student ACT scores could be created by this study for faculty perceptions of safety, respect, or caring.

Table 15.

Summary of Regression Model for Faculty Perceptions of School Climate and Percentage of Student ACT Scores at or Above the National Average

Climate Item	Co-efficient	R2	SEE	Durbin-Watson	Significance
Fairness	-.340	.217	.116	1.87	.004*
Discipline	-.235	.	.09	1.72	.008*
Belonging	-.23		.125	1.76	.067*
Safety	-.124			1.73	.273
Respect	-.059				.545
Caring	-.05			1.81	.584

Alpha \leq .10*

Summary

Overall, the regression research in this study demonstrated that parent perceptions of school climate were the strongest predictor of student ACT scores at or above the national average for the schools included in this study. There were two predictive models for faculty perceptions of school climate and students scoring at or above the national average on the ACT, although they had a negative relationship, and there was only one predictive model that could be created for student perceptions of school climate related to student ACT scores. The student predictive model did not have a practical statistical significance at an Alpha level of only .083.

The fact that parent perceptions of school climate had predictive value for student ACT scores at or above the national average is of great interest. It is also interesting to note that student and faculty perceptions of school climate had little to no statistical significance in predicting student ACT scores. This is important for educators as they search for ways to improve student achievement by developing positive relationships with parents and involving them in their children's educational process.

CHAPTER 5

FINDINGS, CONCLUSIONS, AND RECOMMENDATIONS

Understanding how student, faculty and parent perceptions of school climate are related to Missouri public high school student performance on the ACT was the purpose of this study. Understanding the affect school climate factors have on student performance on the ACT will inform K-12 educators and administrators' implementation of programs and professional development that enable students to succeed. This chapter provides an overview of the problem and the purpose of the study, study group, the null hypotheses, statistical methods, discussion of the findings, and the discussion and recommendations of the study.

Problem of the Study

There was a lack of information regarding how student, faculty and parent perceptions of school climate in Missouri public school districts are related to Missouri public school student performance on the ACT. The DESE AQ given to every student, faculty, and parent of public school districts in the state of Missouri every five years contains a section of questions related to school climate. It was not known how student, faculty, and parent responses to these questions were related to student performance on the ACT. By not clearly understanding the relationship between school climate and student performance on the ACT, K-12 school administrators and educators in Missouri may miss opportunities to implement professional development and programs that could affect school climate and impact ACT scores.

Purpose of the Study

The purpose of the study was to investigate data to assess the relationship between student, faculty, and parent perceptions of school climate and student performance on the ACT. These perceptions were measured by the DESE AQ which is administered once every five years to every public school in the state of Missouri. This study is meant to inform K-12 educational leaders, teachers and policy makers.

Research Questions

Framed by the problem and purpose of this study, the following research questions were considered:

- a. What are the summary statistics for all variables under study; and by response group?
- b. Is there a relationship between Missouri public high school district student responses to the school climate portion of the MSIP AQ and Missouri public high school district ACT scores at or above the national average and if so what questions are more closely related to ACT scores at or above the national average?
- c. Is there a relationship between Missouri public high school district faculty responses to the school climate portion of the MSIP AQ and the percentage of Missouri public high school ACT scores at or above the national average and if so what questions are more closely related to ACT scores at or above the national average?
- d. Is there a relationship between Missouri public high school district parent responses to the school climate portion of the MISP AQ and

Missouri public high school district ACT scores at or above the national average and if so what questions are more closely related to ACT scores at or above the national average?

- e. Can a predictive model be constructed for Missouri public high school district student ACT scores at or above the national average based on Missouri public high school district student, faculty, and parent responses to school climate questions on the MSIP AQ?

Null Hypothesis

In order to investigate the problem, address the purpose, and to answer the research questions of the study, the following null hypotheses were tested:

H0b. There is no relationship (Alpha level = or less than .10) between Missouri public high school district student responses to the school climate portion of the MSIP AQ and Missouri public high school student ACT scores at or above the national average.

H0c. There is no relationship (Alpha level = or less than .10) between Missouri public high school district faculty responses to the school climate portion of the MSIP AQ and Missouri public high school student ACT scores at or above the national average.

H0d. There is no a relationship (Alpha level = or less than .10) between Missouri public high school district parent responses to the school climate portion of the MSIP AQ and Missouri public high school student ACT scores at or above the national average.

H0e. A predictive model cannot be constructed for Missouri public district high school student ACT scores at or above the national average, based on Missouri public high school district student, faculty and parent responses to school climate questions on the MSIP AQ.

Study Group

All Missouri schools that participated in third cycle MSIP reviews during the 2004-2005 school year were used. This representative population included ninety-eight Missouri public schools that participated in the review process during the 2004-2005 school year. The population was selected from the list of schools available from the DESE based on the aforementioned criteria. Geographic diversity was ensured by the fact that the population represented all areas of the state including; rural, urban and suburban.

Statistical Methods

This study employed five statistical analyses to elicit meaning from the data. Statistical analysis was conducted using SPSS statistical software version 18.0. Regression was produced utilizing a linear, step-wise model.

Discussion of Findings

Five research questions were investigated to make meaning of the data regarding the relationship of parent, student and staff perceptions of school climate on student ACT scores. These questions were designed to inform the problem and purpose of the study and was evaluated utilizing a Pearson Correlation Model.

Research Questions a, b, c and d

The first research question was designed to identify the summary descriptive statistics for student, faculty, and parent responses on the AQ to six separate survey items regarding school climate. The statistics provided were; N=98 the number of school involved in the study, the sources of information for each analysis; percentage of students at or above the national average on the ACT (dependent variable), and the independent variables including the percentage of students, faculty and parents agreeing with the

school climate item in question, the mean percentage of these sources, standard deviation, and the significance of the relationship using a threshold of probability value (p)= or less than .10.

Questions b, c, and d were designed to identify the relationship between student, faculty and parent perceptions of the six school climate items on the AQ and student ACT scores at or above the national average. The study yielded the result that there was a strong statistically significant relationship between parent perceptions of the six school climate items in question and student ACT scores at or above the national average. This relationship had a practical significant relationship to the following AQ climate items; perception of fairness, perception of the school having teachers who care, perception of a sense of belonging, perception that discipline is handled fairly, and the perception of children being treated with respect.

The data demonstrated that there was a statistically significant, predictive relationship between parent perception of school climate in their child's school and students scoring at or above the national average on the ACT in the school. These findings were consistent with the research suggesting that the perception of a school is vitally important to the success and the confidence and legitimacy placed in the school by its constituents (Bolman & Deal, 2002; Morgan, 1997).

The data also showed that student and faculty perceptions of the six climate related items in the AQ had little or no statistically significant relationship to student ACT scores at or above the national average. Only faculty perception of whether or not discipline was handled fairly had a practical significant relationship to ACT scores. Interestingly, the relationship was a negative one, in that, as the percentage of faculty

perceiving that discipline was handled fairly rose, ACT scores fell. The data concerning students and faculty was inconsistent with several of the researchers (Sabo, 1998; Haynes, 1998) who assert that interpersonal interactions, especially student and faculty interactions are important factors in forming a positive school climate. This should not be interpreted to mean that those relationships are not important, however, it is interesting to note that parent perceptions of the quality of these interactions and relationships were far more related to student achievement, at least in the case of this study, with student achievement being measured by the percentage of student ACT scores at or above the national average.

It is of interest that parent perceptions of school climate were strongly and positively correlated to student ACT scores at or above the national average. This relationship may be explored to see if there is a relationship to other areas of student performance. This information could be useful for K-12 educators, administrators and policy makers as they seek to improve the perception that parents have of their school climate. In this study it was clearly illustrated that parent perception of a school's climate can be very influential in relationship to student achievement on the ACT.

Null Hypothesis H0b There is no statistically significant relationship found between Missouri public high school district student responses to the school climate portion of the MSIP AQ and Missouri public high school student ACT scores at or above the national average. Therefore, the null hypothesis was accepted.

Null Hypothesis H0c There is a statistically significant relationship between Missouri public high school faculty perception of discipline being handled fairly in the school and students scoring at or above the national average on the ACT with an Alpha of

.011. However, the other five measures of school climate studied revealed no further areas of statistically significant correlation. Therefore, the null hypothesis is accepted.

Null Hypothesis H0d There is a strong statistically significant relationship between Missouri public high school district parent responses to the school climate portion of the MSIP AQ and Missouri public high school student ACT scores at or above the national average. Therefore, the null hypothesis was rejected.

Research Question e

Research question e utilized a linear, step-wise regression to determine if a predictive model could be created based on student, faculty, and parent perceptions of the six AQ school climate items in the study and student ACT scores at or above the national average. As shown in figure 2, the study yielded the result that a strong, statistically significant predictive model could be constructed based on parent perceptions of school climate. Parent perceptions of five of the six AQ climate items demonstrated that as the percentage of parents agreeing with the statement rose, so did the student scores at or above the national average on the ACT. The strongest predictive model based on parent perception of school climate was related to fairness. For each percentage point of rise in parents agreeing that their child was treated fairly at school there was a corresponding rise in ACT scores. This finding also had the strongest practicality. Predictive models could also be created for parent perceptions of; respect, caring, belonging, and discipline related to students scoring at or above the national average on the ACT.

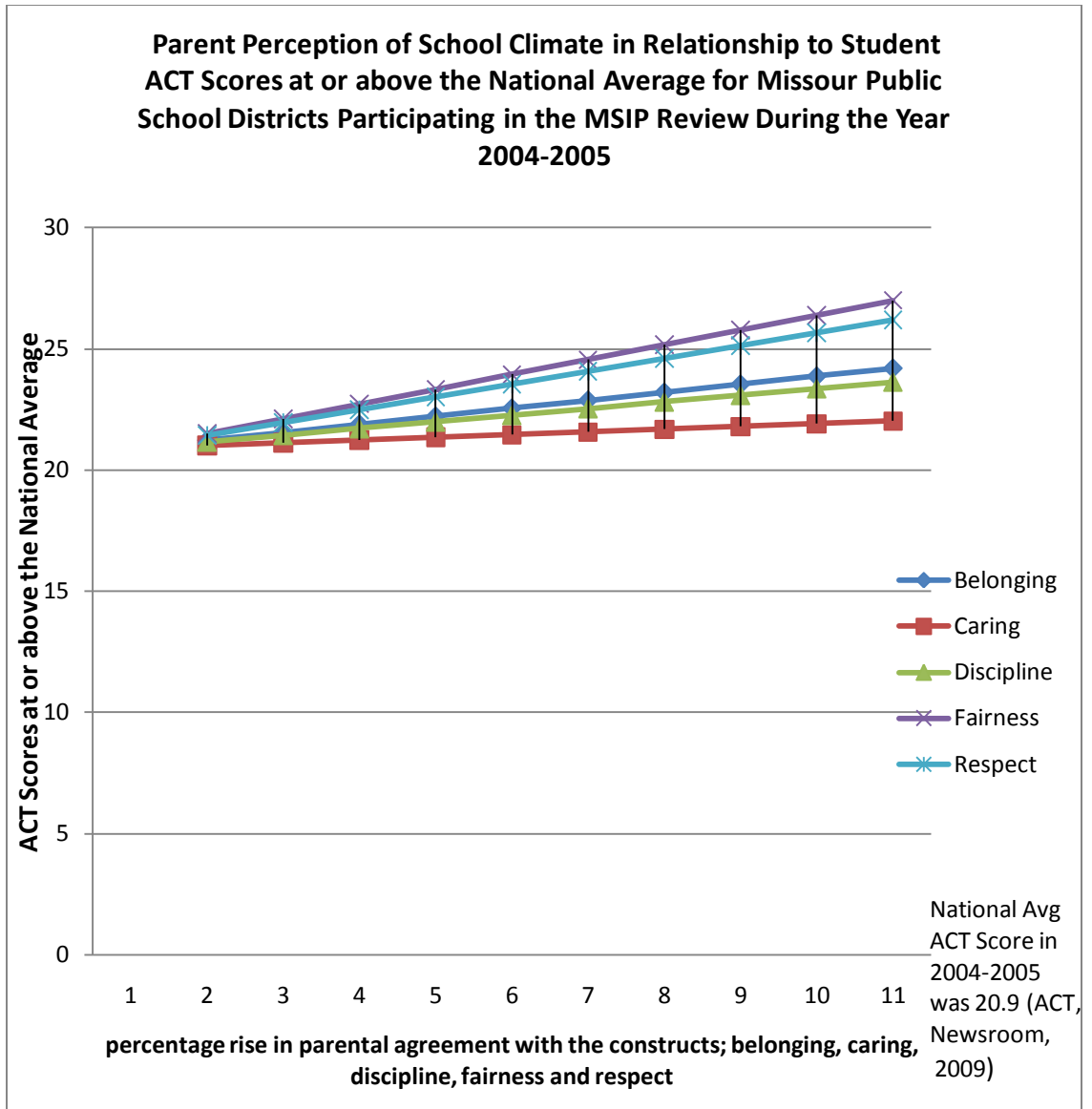


Figure 2. This graph represents parent perceptions of school climate in relationship to ACT scores at or above the national average.

The data revealed that two predictive models for student ACT scores at or above the national average could be created for faculty perceptions of school climate. Faculty perceptions of students being treated fairly and discipline being handled fairly both had predictive value, although they were negatively related to student ACT scores. In the study, as the percent of faculty agreeing with the statements that students were treated fairly and discipline was handled fairly rose, student ACT scores fell. Most notably when

the percentage of faculty agreeing with the statement that students in the school were treated fairly, student ACT scores fell.

The study revealed no predictive model for student responses to AQ climate items and student ACT scores at or above the national average.

Null Hypothesis H0e There was a statistically significant practical predictive model that could be created for student ACT scores at or above the national average utilizing parent responses to five of the six AQ climate items. There were also statistically significant practical predictive models that could be created based on faculty responses to responses to two of the six AQ climate items. Therefore the null hypothesis is rejected.

Conclusions

The following conclusions were drawn from the data analysis findings of this study. Conclusions are limited to the Missouri public school districts completing their third cycle MSIP review in the year 2004-2005 included in the study.

1. Parent perceptions of school climate were an important factor in student achievement related to Missouri public high school district student ACT scores at or above the national level. As parent perceptions of school climate improved, student achievement on the ACT rose. This has important implications for educators and school leaders. It implies that focused efforts should be made by the school to improve relationships with the home and the parents of their students. Improving these relationships and creating a school climate that is inviting for parents and involves them in a climate of mutual

respect, discipline, caring, belonging and fairness are worthy endeavors for the school district.

2. Parent perception of the two school climate measures relating to respect and fairness are of particular note. Educators and school leaders would be well advised to find out more about what is important to parents in terms of fairness and respect. What does respect mean to parents? What is their idea of fairness? Determining the answers to these questions could go a long way towards improving school climate and involving parents in their children's education in a meaningful way.
3. Student and faculty perceptions of school climate weren't related to student achievement on the ACT. This is interesting because one would think that students and faculty with a positive perception of school climate would have a positive effect on ACT scores (Epstein, 1998; Kottkamp & Mulhern, 1987; Fraser, 1989; Terrell, 1994), however that is not the case. The reasons for this were not clear from the data.
4. It was clear from the data included in this study that parents, faculty and students all had different perceptions of the school climate in their particular district. However, only the parent's perceptions were related to student achievement on the ACT. For instance, students and faculty of a particular school might perceive a very high level of fairness in the district, but, if parent perception of fairness is low, then statistically, student ACT scores would be expected to be low compared to the national average.

5. The overriding conclusion is that parent perceptions of school climate are the most important factor for educators and school leaders to consider when trying to improve school climate and student achievement. Although it was not the focus of this study, there is a very good possibility that one would find that as parent perceptions of school climate conditions such as respect and fairness rise, student perceptions of the same climate conditions may fall. The possible reason for this is that the very things most parents value in their child's education and what they perceive to be caring, respect, fairness, etc. could all be things that students view from a very different perspective. So, school districts should continue to set high expectations in regard to these climate factors even though their students may sometimes perceive them as restrictive. This study revealed that parents of students in the Missouri public school districts participating in fourth cycle MSIP during the year 2004-2005 want those high expectations for school climate and when they are in place the net result is higher student achievement.

Recommendations

The following section will provide recommendations for K-12 leaders, practitioners, and policy makers in improving the perception of their school climate by their key constituents, particularly parents to have an impact on student performance on the ACT.

The key findings from this research yield many results consistent with the research and some that are not. Many of the researchers pointed to the importance of developing relationships (Epstein, 1998; Kottkamp & Mulhern, 1987; Fraser, 1989;

Terrell, 1994). It did turn out that relationships were important, however, parent to school relationships were the most important, not student to teacher relationships as suggested by some (Calabrese, 1987; Esposito, 1999; Kuperminc, 2001). It did demonstrate that school climate could have an impact on student achievement on the ACT as many of the researchers suggest (Agnew, 1981; Anderson, 1982; Brookover, 1978; Heck, 1990; Howe, 1985; Keefe & Kelley, 1985). However, parent perceptions of school climate were shown to be both more closely related and better predictors of student performance on the ACT. Interestingly, student and faculty perceptions of school climate showed little if any relationship to student performance on the ACT. So, utilizing strategies and implementing policies that will include parents in their child's educational process is critical. Since parent perceptions of school climate are demonstrated to be closely related to student performance on the ACT efforts should be made by educators and policy makers to develop relationships with parents that will give them the opportunity to be involved in positive aspects of the school. Developing these relationships and having many opportunities for parents to participate at the school in a positive way should help them develop a more favorable perception of the school's climate. The following is a list of six suggestions that should help to strengthen school to parent relationships and guide future research:

1. Create multiple opportunities for parents, students and teachers to participate in school activities outside of the normal classroom setting to improve the perception of belonging. School groups such as team sports, clubs, and organizations with opportunities for students with varied interests should improve the sense of belonging. Parent-teacher conferences and frequent communication

between teachers and parents should also help improve the sense of belonging parents have in the school. Parents want to know that there is a place for their child in the school and that their child has a niche they can call their own.

2. Schools and teachers can demonstrate to parents that they care about their child's welfare and education through frequent and substantive communication. This communication should come in the form of e-mail, phone calls, newsletters, and whenever possible, personal contact. Most educators care about their students or they would not have chosen education as a profession, however, communicating this caring to parents is crucial to improving the perception parents have for the level of care taken for their child. This type of communication should be reinforced and supported by administration and through professional development.
3. Fairness and the implementation of fair disciplinary practices are an important consideration for schools in improving the perception parents have of the climate of the school. All students should be given an equal opportunity for success. This means implementing programs of study and discipline that meet the needs of a diverse school population. One size does not fit all. School programs should focus on post-secondary success for all students, not just the college bound. Therefore, programs designed to help students succeed in technical fields and in the world of work are of equal importance. If parents perceive that their child has the same opportunity to pursue their interests and goals as every other student then their perception of school climate should improve. It would be desirable to achieve this outcome by involving parents in school discipline and curriculum planning.

4. It should be no surprise that respect is an important factor in school climate and can have an impact on student achievement. Gone are the days when teachers, administrators, coaches, and schools were granted a certain amount of respect merely due to their position. Respect is now very much a two-way street. It can still be earned, however, when schools are willing to create a climate of mutual respect among all stakeholders of the school. These stakeholders must include school administrators, teachers, students, parents and community. Involving these stakeholders in a collaborative manner in the school decision making process is a good way to establish mutual respect. Schools can show parents respect by being efficient with district resources and, once again, involving parents in the school planning process to demonstrate to them respect for their perspectives and ideas.
5. Finally, more emphasis on the importance of school climate should be placed on teacher, administrator, and educational policy maker training programs. Many of these programs deal with technical aspects of teaching, legal aspects of administration, conducting successful meeting, writing clear policy, developing curriculum standards, etc. However, they tend to leave out the importance of relationship and collaboration building. This study reveals that these kinds of relationships, particularly with parents, while difficult to create at times, can be very important and have an impact on student achievement.
6. It would also be of interest to see if this study could be replicated utilizing data from the fourth MSIP cycle which concluded in 2010. If similar results were gleaned, it could add validity to the conclusions of this study.

Summary

Descriptive statistics revealed that there was a relationship between Missouri public school climate as perceived by parents and the achievement of students in Missouri public high schools as measured by the percentage of students at or above the national average on the ACT. However, student and faculty perceptions of school climate were found to have little, or no statistical significance in relation to student ACT scores at or above the national average.

Additionally, it was found that a predictive model for ACT scores at or above the national average for Missouri public high school students could be created utilizing parent perceptions of school climate. In particular, parent perceptions of fairness, respect, discipline, belonging, and caring in their child's school all showed a statistically practical relationship with student ACT scores and a predictive model for ACT scores could be created for each of these measures of school climate based on parent response.

This study clearly demonstrated that parent perception of school climate was an important indicator of student achievement. Therefore, educators and educator training programs would be wise to emphasize the importance of the relationship between the parent and the school. Since student achievement is the ultimate goal and a large part of the accountability process for public schools, efforts should be made to strengthen this relationship.

This study rejects two of the four null hypotheses posited. However, the research does have value for practitioners. There was enough statistically significant data to indicate that perceptions of school climate, in particular parent perceptions, are related to student performance on the ACT. This significance is valuable for K-12 educational

practitioners and policy makers as they develop policy and professional development programs for the success of Missouri public school students.

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Appendix A

Descriptive Statistics

Safety			
	Mean	Std. Deviation	N
Percent Above at/above ACT	30.787	12.1866	98
Parents Safety	79.876	9.5069	98
Students Safety	66.366	11.1678	98
Staff Safety	96.36	5.789	98

Belonging			
	Mean	Std. Deviation	N
% students at/above ACT	30.786598	12.1866213	98
parent belonging	66.404124	11.5747140	98
student belonging	54.498969	9.3374481	98
staff belonging	87.078351	10.0329583	98

Caring			
	Mean	Std. Deviation	N
% students at/above ACT	30.786598	12.1866213	98
parent caring	60.679381	11.1263034	98
student caring	45.860825	9.6469701	98
staff caring	96.114433	3.9832119	98

Fairness

	Mean	Std. Deviation	N
% students at/above ACT	30.786598	12.1866213	98
parent fairness	72.001031	9.5806236	98
student fairness	59.734021	9.1608072	98
staff fairness	86.922680	10.1205874	98

Discipline

	Mean	Std. Deviation	N
% students at/above ACT	30.786598	12.1866213	98
parent discipline	54.943299	11.1802192	98
student discipline	47.704124	13.1603898	98
staff discipline	82.283505	13.5477063	98

Respect

	Mean	Std. Deviation	N
% students at/above ACT	30.786598	12.1866213	98
parent respect	67.461856	9.9730404	98
student respect	60.312371	9.8210825	98
staff respect	94.814433	5.9444679	98

Appendix B
Correlations

Safety		Percent Above	Parents Safety	Students Safety	Staff Safety
Pearson Correlation	Percent Above	1.000	.135	.074	-.040
	Parents Safety	.135	1.000	.541	.444
	Students Safety	.074	.541	1.000	.385
	Staff Safety	-.040	.444	.385	1.000
Sig. (1-tailed)	Percent Above	.	.093	.236	.348
	Parents Safety	.093	.	.000	.000
	Students Safety	.236	.000	.	.000
	Staff Safety	.348	.000	.000	.
N	Percent Above	98	98	98	98
	Parents Safety	98	98	98	98
	Students Safety	98	98	98	98
	Staff Safety	98	98	98	98

Belonging		% students	
		at/above ACT	parent belonging
Pearson Correlation	% students at/above ACT	1.000	.252
	parent belonging	.252	1.000
	student belonging	.036	.486
	staff belonging	-.093	.312
Sig. (1-tailed)	% students at/above ACT	.	.006
	parent belonging	.006	.
	student belonging	.364	.000
	staff belonging	.182	.001
N	% students at/above ACT	98	98
	parent belonging	98	98
	student belonging	98	98
	staff belonging	98	98

Belonging

		student	
		belonging	staff belonging
Pearson Correlation	% students at/above ACT	.036	-.093
	parent belonging	.486	.312
	student belonging	1.000	.344
	staff belonging	.344	1.000
Sig. (1-tailed)	% students at/above ACT	.364	.182
	parent belonging	.000	.001
	student belonging	.	.000
	staff belonging	.000	.
N	% students at/above ACT	98	98
	parent belonging	98	98
	student belonging	98	98
	staff belonging	98	98

Caring

		% students	
		at/above ACT	parent caring
Pearson Correlation	% students at/above ACT	1.000	.299
	parent caring	.299	1.000
	student caring	-.061	.330
	staff caring	-.047	.119
Sig. (1-tailed)	% students at/above ACT	.	.001
	parent caring	.001	.
	student caring	.277	.000
	staff caring	.323	.122
N	% students at/above ACT	98	98
	parent caring	98	98
	student caring	98	98
	staff caring	98	98

Caring

		student caring	staff caring
Pearson Correlation	% students at/above ACT	-.061	-.047
	parent caring	.330	.119
	student caring	1.000	.210
	staff caring	.210	1.000
Sig. (1-tailed)	% students at/above ACT	.277	.323
	parent caring	.000	.122
	student caring	.	.019
	staff caring	.019	.
N	% students at/above ACT	98	98
	parent caring	98	98
	student caring	98	98
	staff caring	98	98

Fairness

		% students at/above ACT	parent fairness
Pearson Correlation	% students at/above ACT	1.000	.383
	parent fairness	.383	1.000
	student fairness	.077	.451
	staff fairness	-.125	.329
Sig. (1-tailed)	% students at/above ACT	.	.000
	parent fairness	.000	.
	student fairness	.226	.000
	staff fairness	.109	.000
N	% students at/above ACT	98	98
	parent fairness	98	98
	student fairness	98	98
	staff fairness	98	98

Fairness

		student fairness	staff fairness
Pearson Correlation	% students at/above ACT	.077	-.125
	parent fairness	.451	.329
	student fairness	1.000	.296
	staff fairness	.296	1.000
Sig. (1-tailed)	% students at/above ACT	.226	.109
	parent fairness	.000	.000
	student fairness	.	.002
	staff fairness	.002	.
N	% students at/above ACT	98	98
	parent fairness	98	98
	student fairness	98	98
	staff fairness	98	98

Discipline

		% students	
		at/above ACT	parent discipline
Pearson Correlation	% students at/above ACT	1.000	.219
	parent discipline	.219	1.000
	student discipline	.016	.416
	staff discipline	-.231	.124
Sig. (1-tailed)	% students at/above ACT	.	.015
	parent discipline	.015	.
	student discipline	.439	.000
	staff discipline	.011	.112
N	% students at/above ACT	98	98
	parent discipline	98	98
	student discipline	98	98
	staff discipline	98	98

Discipline

		student	
		discipline	staff discipline
Pearson Correlation	% students at/above ACT	.016	-.231
	parent discipline	.416	.124
	student discipline	1.000	.249
	staff discipline	.249	1.000
Sig. (1-tailed)	% students at/above ACT	.439	.011
	parent discipline	.000	.112
	student discipline	.	.007
	staff discipline	.007	.
N	% students at/above ACT	98	98
	parent discipline	98	98
	student discipline	98	98
	staff discipline	98	98

Respect

		% students	
		at/above ACT	parent respect
Pearson Correlation	% students at/above ACT	1.000	.385
	parent respect	.385	1.000
	student respect	.053	.407
	staff respect	-.018	.153
Sig. (1-tailed)	% students at/above ACT	.	.000
	parent respect	.000	.
	student respect	.304	.000
	staff respect	.432	.067
N	% students at/above ACT	98	98
	parent respect	98	98
	student respect	98	98
	staff respect	98	98

Respect

		student respect	staff respect
Pearson Correlation	% students at/above ACT	.053	-.018
	parent respect	.407	.153
	student respect	1.000	.228
	staff respect	.228	1.000
Sig. (1-tailed)	% students at/above ACT	.304	.432
	parent respect	.000	.067
	student respect	.	.012
	staff respect	.012	.
N	% students at/above ACT	98	98
	parent respect	98	98
	student respect	98	98
	staff respect	98	98

Appendix C
ANOVA

ANOVA^b Safety

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	262.516	1	262.516	1.782	.185 ^a
	Residual	14143.317	96	147.326		
	Total	14405.833	97			

a. Predictors: (Constant), Parents Safety

ANOVA^c Belonging

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	914.089	1	914.089	6.504	.012 ^a
	Residual	13491.744	96	140.539		
	Total	14405.833	97			
2	Regression	1383.790	2	691.895	5.048	.008 ^b
	Residual	13022.042	95	137.074		
	Total	14405.833	97			

a. Predictors: (Constant), parent belonging

b. Predictors: (Constant), parent belonging, staff belonging

c. Dependent Variable: % students at/above ACT

ANOVA^c Caring

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	1285.393	1	1285.393	9.405	.003 ^a
	Residual	13120.439	96	136.671		
	Total	14405.833	97			
2	Regression	1695.245	2	847.622	6.335	.003 ^b
	Residual	12710.588	95	133.796		
	Total	14405.833	97			

a. Predictors: (Constant), parent caring

b. Predictors: (Constant), parent caring, student caring

c. Dependent Variable: % student at/above ACT

ANOVA^c Fairness

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	2108.990	1	2108.990	16.465	.000 ^a
	Residual	12296.843	96	128.092		
	Total	14405.833	97			
2	Regression	3130.547	2	1565.274	13.188	.000 ^b
	Residual	11275.285	95	118.687		
	Total	14405.833	97			

a. Predictors: (Constant), parent fairness

b. Predictors: (Constant), parent fairness, faculty fairness

c. Dependent Variable: % students at/above ACT

ANOVA^c Discipline

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	765.550	1	765.550	5.388	.022 ^a
	Residual	13640.283	96	142.086		
	Total	14405.833	97			
2	Regression	1661.595	2	830.798	6.193	.003 ^b
	Residual	12744.237	95	134.150		
	Total	14405.833	97			

a. Predictors: (Constant), faculty discipline

b. Predictors: (Constant), faculty discipline, parent discipline

c. Dependent Variable: % students at/above ACT

ANOVA^c Respect

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	2135.668	1	2135.668	16.709	.000 ^a
	Residual	12270.165	96	127.814		
	Total	14405.833	97			
2	Regression	2323.340	2	1161.670	9.134	.000 ^b
	Residual	12082.492	95	127.184		
	Total	14405.833	97			

a. Predictors: (Constant), parent respect

b. Predictors: (Constant), parent respect, student respect

c. Dependent Variable: % students at/above ACT

Appendix D
Regression Model Summaries

Model Summary^b Safety

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	.135 ^a	.018	.008	12.1378	1.731

a. Predictors: (Constant), Parents Safety

b. Dependent Variable: Percent Above

Model Summary^c Belonging

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	.252 ^a	.063	.054	11.8549145	
2	.310 ^b	.096	.077	11.7078662	1.760

a. Predictors: (Constant), parent belonging

b. Predictors: (Constant), parent belonging, faculty belonging

c. Dependent Variable: % students at/above ACT

Model Summary^c Caring

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	.299 ^a	.089	.080	11.6906477	
2	.343 ^b	.118	.099	11.5670074	1.812

a. Predictors: (Constant), parent caring

b. Predictors: (Constant), parent caring, student caring

c. Dependent Variable: % students at/above ACT

Model Summary^c Fairness

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	.383 ^a	.146	.138	11.3177786	
2	.466 ^b	.217	.201	10.8943661	1.869

a. Predictors: (Constant), parent fairness

b. Predictors: (Constant), parent fairness, faculty fairness

c. Dependent Variable: % students at/above ACT

Model Summary^c Discipline

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	.231 ^a	.053	.043	11.9199950	
2	.340 ^b	.115	.097	11.5823084	1.720

a. Predictors: (Constant), faculty discipline

b. Predictors: (Constant), faculty discipline, parent discipline

c. Dependent Variable: % students at/above ACT

Model Summary^c Respect

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	.385 ^a	.148	.139	11.3054949	
2	.402 ^b	.161	.144	11.2775941	1.858

a. Predictors: (Constant), parent respect

b. Predictors: (Constant), parent respect, student respect

c. Dependent Variable: % students at/above ACT

Appendix E

Descriptive Statistical Analysis Results for Safety

As shown in Table one, the mean percentage of parents agreeing with the statement that their child's school is safe was 79.9 percent with a standard deviation of 9.5. The correlation of parent perception of school safety to the percent of students scoring at or above the state average on the ACT is .135. This results in a weak correlation of less than two percent significance. The correlation of parent perception of safety in their child's school to students scoring at or above the state average on the ACT has a significance of $\text{Alpha} = .093$. This is significant to the Alpha of equal to or less than 0.10, however there is no practical significant correlation to the relationship of parent perception of their child's safety at school and students scoring at or above the state average ACT score.

The mean percentage of students agreeing with the statement that they feel safe at their school was 66.4 percent with a standard deviation of 11.2. The correlation of student perception of school safety to the percent of students scoring at or above the state average ACT is .074. The correlation of student perception of safety in their school to students scoring at or above the state average on the ACT has a significance of $\text{Alpha} = .236$. There is no statistical significance to the relationship of student perception of safety in their school to students scoring at or above the state average ACT score.

The mean percentage of faculty agreeing with the statement that their school is safe is 93.3 percent with a standard deviation of 5.8. The correlation of faculty perception of school safety to students scoring at or above the state average on the ACT is .040. The correlation of faculty perception of safety in their school to students scoring at or above

the state average on the ACT has a significance of Alpha =.348. There is no statistical significance to the relationship of staff perception of safety in their school to students scoring at or above the state average ACT score.

Table 1.
Summary Statistical Analysis of Results for Parent, Faculty, and Student Perceptions of Safety as Measured by the DESE AQ “Students are Safe at this School”

N	Sources	Mean %	SD	Correlation	Significance
	% Students at or above ACT	30.8	12.2	-	-
98	% Parents Agree	79.9	9.5	.135	.093*
98	% Students Agree	66.4	11.2	.074	.236
98	% Faculty Agree	93.3	5.8	.040	.348

Note: Alpha= or less than 0.10*
 N=number of schools

Appendix F

Descriptive Statistical Analysis Result for Belonging

As shown in Table 2, the mean percentage of students agreeing with the statement that there is a sense of belonging at their school was 54.5 percent with a standard deviation of 9.3. The correlation of student perception of school belonging to the percent of students scoring at or above the state average ACT is .036. The correlation of student perception of belonging in their school to students scoring at or above the state average on the ACT has a significance of $\text{Alpha} = .728$. There is no statistical significance to the relationship of student perception of belonging in their school to students scoring at or above the state average ACT score.

The mean percentage of faculty agreeing with the statement that their school has a sense of belonging is 87.1 percent with a standard deviation of 10. The correlation of faculty perception of school belonging to students scoring at or above the state average on the ACT is -.093. The correlation of faculty perception of belonging in their school to students scoring at or above the state average on the ACT has a significance of $\text{Alpha} = .363$. There is no statistical significance to the relationship of faculty perception of belonging in their school to students scoring at or above the state average ACT score.

The mean percentage of parents agreeing with the statement that their child's school has a sense of belonging was 66.4 percent with a standard deviation of 11.6. The correlation of parent perception of school belonging to the percent of students scoring at or above the state average on the ACT is .252. The correlation of parent perception of belonging in their child's school to students scoring at or above the national average on the ACT has a significance of $\text{Alpha} = .012$. This is significant to the Alpha of equal to or

less than 0.10, and there is a practical significant correlation to the relationship of parent perception of a sense of belonging in their child’s school and students scoring at or above the national average ACT score.

Table 2.
Summary Statistical Analysis of Results for Parent, Faculty, and Student Perceptions of Belonging as Measured by the DESE AQ “There is a sense of belonging in this school”

N	Sources	Mean %	SD	Correlation	Significance
98	% of students at or above state average ACT	30.8	12.2	-	-
98	% Of parents agree	66.4	11.6	.252	.012*
98	% of students agree	54.5	9.3	.036	.728
98	% of faculty agree	87.1	10.0	-.093	.363

Note: Alpha \leq .10*
 N=number of schools

Appendix G

Descriptive Summary Statistical Analysis for Caring

As shown in Table 3, the mean percentage of students agreeing with the statement that they have teachers who care at their school was 45.9 percent with a standard deviation of 9.6. The correlation of student perception of teachers who care to the percent of students scoring at or above the state average ACT is $-.061$. The correlation of student perception of teachers who care in their school to students scoring at or above the national average on the ACT has a significance of $\text{Alpha} = .553$. There is no statistical significance to the relationship of student perception of teachers who care in their school to students scoring at or above the national average ACT score.

The mean percentage of faculty agreeing with the statement that their school has teachers who care is 96.1 percent with a standard deviation of 4. The correlation of faculty perception of teachers who care to students scoring at or above the national average on the ACT is $-.047$. The correlation of faculty perception of teachers who care in their school to students scoring at or above the state average on the ACT has a significance of $\text{Alpha} = .646$. There is no statistical significance to the relationship of faculty perception of teachers who care in their school to students scoring at or above the national average ACT score.

The mean percentage of parents agreeing with the statement that their child's school has teachers who care about their students was 60.7 percent with a standard deviation of 11.1. The correlation of parent perception of their school having teachers who care to the percent of students scoring at or above the state average on the ACT is $.299$. The correlation of parent perception of teachers who care in their child's school to students

scoring at or above the state average on the ACT has a significance of Alpha= .003. This is significant to the Alpha of equal to or less than 0.10, and there is a practical significant correlation to the relationship of parent perception of teachers who care in their child's school and students scoring at or above the state average ACT score.

Table 3.

Summary Statistical Analysis of Results for Parent, Faculty, and Student Perceptions of Caring as Measured by the DESE AQ "Teachers in this school really care"

N	Sources	Mean %	SD	Correlation	Significance
98	% of students at or above state average ACT	30.8	12.2	-	-
98	% Of parents agree	60.7	11.1	.299	.003*
98	% of students agree	45.9	9.6	-.061	.553
98	% of faculty agree	96.1	4.0	-.047	.646

Note: Alpha \leq .10*

N=number of schools

Appendix H

Descriptive Summary Statistical Analysis for Discipline

As shown in Table 4, the mean percentage of students agreeing with the statement that discipline is handled fairly at their school was 47.7 percent with a standard deviation of 13.2. The correlation of student perception of fair discipline to the percent of students scoring at or above the state average ACT is .016. The correlation of student perception of fair discipline in their school to students scoring at or above the state average on the ACT has a significance of $\text{Alpha} = .439$. There is no statistical significance to the relationship of student perception of fair discipline in their school to students scoring at or above the state average ACT score.

The mean percentage of faculty agreeing with the statement that discipline is handled fairly in their school is 82.3 percent with a standard deviation of 13.5. The correlation of faculty perception of fair discipline to students scoring at or above the state average on the ACT is .011. The correlation of faculty perception of fair discipline in their school to students scoring at or above the state average on the ACT has a significance of $\text{Alpha} = .011$. There is a statistical significance to the relationship of faculty perception of fair discipline in their school to students scoring at or above the state average ACT score.

The mean percentage of parents agreeing with the statement that discipline is handled fairly in their child's school was 54.9 percent with a standard deviation of 11.2. The correlation of parent perception of fairly handled discipline in their child's school to the percent of students scoring at or above the state average on the ACT is .219. The correlation of parent perception of fair discipline in their child's school to students

scoring at or above the state average on the ACT has a significance of Alpha = .015. This is significant to the Alpha of equal to or less than 0.10, and there is a practical significant correlation to the relationship of parent perception of fair discipline in their child's school and students scoring at or above the state average ACT score.

Table 4.
Summary Statistical Analysis of Results for Parent, Faculty, and Student Perceptions of Discipline as Measured by the DESE AQ "Discipline in this school is handled fairly"

N=	Sources	Mean %	SD	Correlation	Significance
98	% of students at or above state average ACT	30.8	12.2	-	-
98	% Of parents agree	54.9	11.2	.219	.015*
98	% of students agree	47.7	13.2	.016	.439
98	% of faculty agree	82.3	13.5	-.231	.011*

Appendix I

Descriptive Summary Statistical Analysis for Fairness

As shown in Table 5, the mean percentage of students agreeing with the statement that they are treated fairly at their school was 59.7 percent with a standard deviation of 9.2. The correlation of student perception of fairness to the percent of students scoring at or above the state average ACT is .077. The correlation of student perception of fairness in their school to students scoring at or above the state average on the ACT has a significance of Alpha= .226. There is no statistical significance to the relationship of student perception of fairness in their school to students scoring at or above the national average ACT score.

The mean percentage of faculty agreeing with the statement that students are treated fairly in their school is 86.9 percent with a standard deviation of 10.1. The correlation of faculty perception of fairness to students scoring at or above the state average on the ACT is -.125. The correlation of faculty perception of fair discipline in their school to students scoring at or above the state average on the ACT has a significance of Alpha= .109. There is no statistical significance to the relationship of faculty perception of students being treated fairly in their school to students scoring at or above the national average ACT score.

The mean percentage of parents agreeing with the statement that their child is treated fairly at school was 72.0 percent with a standard deviation of 9.6. The correlation of parent perception of fairness in their child's school to the percent of students scoring at or above the state average on the ACT is .383. The correlation of parent perception of fairness in their child's school to students scoring at or above the state average on the

ACT has a significance of Alpha= .000. This is significant to the Alpha of equal to or less than 0.10, and there is a practical significant relationship of parent perception of fairness in their child’s school and students scoring at or above the state average ACT score.

Table 5.

Summary Statistical Analysis of Results for Parent, Faculty, and Student Perceptions of Fairness as Measured by the DESE AQ “Children are treated fairly at school”

N	Sources	Mean %	SD	Correlation	Significance
98	% of students at or above state average ACT	30.8	12.2	-	-
98	% Of parents agree	72.0	9.6	.383	.000*
98	% of students agree	59.7	9.2	.077	.226
98	% of faculty agree	86.9	10.1	-.125	.109

Note: Alpha ≤ .10

N=number of schools

Appendix J

Descriptive Summary Statistical Analysis for Respect

As shown in Table 6, the mean percentage of students agreeing with the statement that they are treated with respect at their school was 60.3 percent with a standard deviation of 9.8. The correlation of student perception of being treated with respect in their school to the percent of students scoring at or above the state average ACT is .053. The correlation of student perception of respect in their school to students scoring at or above the state average on the ACT has a significance of Alpha= .304. There is no statistical significance to the relationship of student perception of being treated with respect in their school to students scoring at or above the state average ACT score.

The mean percentage of faculty agreeing with the statement that students are treated with respect in their school is 94.8 percent with a standard deviation of 5.9. The correlation of faculty perception of students being treated with respect to students scoring at or above the state average on the ACT is -.018. The correlation of faculty perception of students being treated with respect in their school to students scoring at or above the state average on the ACT has a significance of Alpha =.432. There is no statistical significance to the relationship of faculty perception of students being treated with respect in their school to students scoring at or above the state average ACT score.

Table 6 illustrates that the mean percentage of parents agreeing with the statement that their child is treated with respect at school was 67.5 percent with a standard deviation of 10.0. The correlation of parent perception of respect in their child's school to the percent of students scoring at or above the state average on the ACT is .385. The correlation of parent perception of respect in their child's school to students scoring at or

above the national average on the ACT has a significance of Alpha= .000. This is significant to the Alpha of equal to or less than 0.10, and there is a practical significant correlation to the relationship of parent perception of respect in their child's school and students scoring at or above the national average ACT score.

Table 6.
Summary Statistical Analysis of Results for Parent, Faculty, and Student Perceptions of Respect as Measured by the DESE AQ "Children are treated with respect at school"

N	Sources	Mean %	SD	Correlation	Significance
98	% of students at or above state average ACT	30.8	12.2	-	-
98	% Of parents agree	67.5	10.0	.385	.000*
98	% of students agree	60.3	9.8	.053	.304
98	% of faculty agree	94.8	5.9	-.018	.432

Note: Alpha ≤ .10*
 N=number of school

Appendix K

Regression Summary Analysis for Safety

Regression analysis for safety. As shown in Table 8, no significant regression model was found. The model was the percent of students at or above the national average on the ACT=16.97+ (%parents * .17) + (%students * .001) + (%faculty * -.124). This equation has the following limitations; the R2 is .018, or less than one percent practicality. The Durbin-Watson= 1.73, which is acceptable according to Field (2005).

There is no predictive model in this study that can be produced for student, faculty or parent perceptions of student safety and the impact they have on student ACT scores at or above the national average.

Table 8
Summary of Multiple Step-wise Regression Analysis Results for DESE AQ “My Child’s School is Safe”

R=Correlation	R2	SEE	Durbin-Watson	Significance
.135	.018	12.1	1.73	.185
Regression	Coefficient			
Constant	16.97	10.4		.107
% of parents	.17	.130		.185
% of students	.001			.995
% of faculty	-.124			.273

Note: Alpha ≤ 0.10*

Appendix L

Regression Summary Analysis for Belonging

As shown in Table 9 a significant, multiple, step-wise regression model was found. The model was the percent of students scoring at or above the national average on the ACT= $29.1+(\%parents * .33)+(\%students * -.09)+(\%faculty * -.23)$. This equation has the following limitations; the R2 is .1, or only ten percent practicality; the Durbin-Watson is 1.76 which is acceptable according to Field (2005).

These findings suggest that parent perceptions of belonging are a very important predictor of students scoring at or above the national average on the ACT. However, student and faculty perceptions have a negative impact. For instance, utilizing the aforementioned formula, if the percentage of students, faculty, and parents agreeing with the statement that there is a sense of belonging at their school is eighty percent then the formula would indicate the following; Percentage of students at or above the national average on the ACT= $29.1+ (.80 * .33)+(.80 * -.09)+(.80 * -.23)$. The results of this formula for parents agreeing with the statement at eighty percent would be to raise student ACT scores to 31.7 percent at or above the national average. The results of the formula for student agreement with the statement would be to lower student ACT scores to 28.4 percent at or above the national average and faculty agreement with the statement would have the effect of lowering ACT scores at or above the national average to 27.3 percent.

In other words, for every one percent increase in parental agreement that there is a sense of belonging in their child's school one could expect a .33 percent increase in students scoring at or above the national average on the ACT. The negative relationship

of student and faculty perceptions of a sense of belonging in school to students scoring at or above the national average on the ACT is expressed as follows; for every one percent increase in students agreeing that there is a sense of belonging in their school one could expect ACT scores at or above the national average to decrease by .09 percent and a one percent increase in faculty agreement with the statement would result in a .23 percent decrease in ACT scores. However, only parent and faculty perceptions of belonging have a practical statistical significance in predicting student ACT scores at or above the national average.

Table 9.
Summary of Regression Analysis Results for DESE AQ "Sense of Belonging"

R=Correlation	R ²	SEE	Durbin-Watson	Significance
.310	.1	11.7	1.76	.008*
Regression	Coefficient			
Constant	29.1	11.05		.010*
% of parents	.33	.108		.003*
% of students	-.09			.548
% of faculty	-.23	.125		.067*

Note: Alpha ≤ 0.10*

Appendix M

Regression Summary Analysis for Caring

As shown in table 10. Demonstrates, there was a significant, multiple, step-wise regression model found. The model was the percent of students scoring at or above the national average on the ACT= $17.4+(\%parents * .112)+(\%students * .129)+(\%faculty * (no\ significant\ practicality))$. This equation has the following limitations; the R2 is .12, or only twelve percent practicality; the Durbin-Watson is 1.81 which is acceptable according to Field (2005).

These findings suggest that parent perceptions of teachers who care are a very important predictor of students scoring at or above the national average on the ACT. Student perceptions of having teachers who care is a much weaker predictor of student ACT scores at or above the national average with a statistical practicality of only Alpha= .083.

Utilizing the aforementioned formula, if the percentage of students, faculty, and parents agreeing with the statement that there is a sense of belonging at their school is eighty percent then the formula would indicate the following; Percentage of students at or above the national average on the ACT= $17.4+ (.80 * .112)+(.80 * .129)$. The results of this formula for parents agreeing with the statement at eighty percent would be to raise student ACT scores to 18.3 percent at or above the national average. The results of the formula for student agreement with the statement would be to raise student ACT scores to 18.4 percent at or above the national average.

In other words, for every one percent increase in parental agreement that teachers in their child's school care one could expect a .112 percent increase in students scoring at

or above the national average on the ACT. The relationship of student perceptions of teachers caring in school to students scoring at or above the national average on the ACT is expressed as follows; for every one percent increase in students agreeing that there is a sense of belonging in their school one could expect ACT scores at or above the national average to increase by .129 percent. However, only parent perceptions of teachers who care in their child’s school is shown to have a practical statistical significance in predicting student ACT scores at or above the national average. The significance of parent perceptions of teachers who care on ACT scores is statistically significant and Alpha = .001 while the significance of student perceptions of teachers who care is much weaker at Alpha = .083.

Table 10.
Summary of Regression Analysis Results for DESE AQ “Teachers who Care”

R=Correlation	R2	SEE	Durbin-Watson	Significance
.343	.118	11.6	1.81	.003*
Regression	Coefficient			
Constant	17.4	7.5		.022*
% of parents	.39	.112		.001*
% of students	-.23	.129		.083*
% of faculty	-.05			.584

Note: Alpha ≤ 0.10*

Appendix N

Regression Summary Analysis for Discipline

As shown in Table 11., there was a significant, multiple, step-wise regression model found. The model was the percent of students scoring at or above the national average on the ACT= $35.1 + (\% \text{parents} * .274) + (\% \text{students} * \text{no significant practicality}) + (\% \text{faculty} * -.235)$. This equation has the following limitations; the R² is .12, or only twelve percent practicality; the Durbin-Watson is 1.72 which is acceptable according to Field (2005).

These findings suggest that faculty perceptions of discipline being handled fairly are a very important predictor of students scoring at or above the national average on the ACT with a statistical significance of .008. Parent perception of discipline being handled fairly is also a very strong predictor of student ACT scores at or above the national average with a statistical practicality of Alpha= .011. However, faculty perceptions of discipline have a negative relationship with student ACT scores at or above the national average and parent perceptions have a positive relationship.

Utilizing the aforementioned formula, if the percentage of parents and faculty agreeing with the statement that discipline is handled fairly at their school is eighty percent then the formula would indicate the following; Percentage of students at or above the national average on the ACT= $35.1 + (.80 * .274) + (.80 * -.235)$. The results of this formula for parents agreeing with the statement at eighty percent would be to see a rise in student ACT scores to 37.3 percent at or above the national average. The results of the formula for student agreement with the statement would be to see a decrease in student ACT scores to 33.2 percent at or above the national average.

In other words, for every one percent increase in parental agreement that that discipline is handled fairly in their school one could expect a .274 percent increase in students scoring at or above the national average on the ACT. The relationship of faculty perceptions of discipline being handled fairly to students scoring at or above the national average on the ACT is expressed as follows; for every one percent increase in faculty agreeing that there is a sense of belonging in their school one could expect to see a decrease in ACT scores at or above the national average by .235 percent.

Both faculty and parent perceptions of discipline being handled fairly are predictors of students scoring at or above the national average, however as parent perception of fair discipline increases, ACT scores increase and as faculty percentage of agreement increases, ACT scores decrease.

Table 11.

Summary of Regression Analysis Results for DESE AQ "Discipline is Handled Fairly"

R=Correlation	R2	SEE	Durbin-Watson	Significance
.34	.115	11.6	1.72	.003*
Regression	Coefficient			
Constant	35.1	8.8		.000*
% of parents	.274	.11		.011*
% of student	-.030			.783
% of faculty	-.235	.09		.008*

Note: Alpha \leq 0.10

Appendix O

Regression Summary Analysis for Fairness

As shown in Table 12, there was a significant, multiple, step-wise regression model found. The model was the percent of students scoring at or above the national average on the ACT= $16.8+(\%parents * .61)+(\%students * no\ significant\ practicality)+(\%faculty * -.340)$. This equation has the following limitations; the R2 is .22, or only twenty-two percent practicality; the Durbin-Watson is 1.87 which is acceptable according to Field (2005).

These findings suggest that parent perceptions of students being treated fairly are a very important predictor of students scoring at or above the national average on the ACT with a statistical significance of Alpha= .000. Faculty perceptions of students being treated fairly is also a very strong predictor of student ACT scores at or above the national average with a statistical practicality of Alpha= .004. However, faculty perception of students being treated fairly has a negative relationship with student ACT scores at or above the national average and parent perceptions have a positive relationship. There is no predictive model that can be created from student perceptions of being treated fairly.

Utilizing the aforementioned formula, if the percentage of parents and faculty agreeing with the statement that discipline is handled fairly at their school is eighty percent then the formula would indicate the following; Percentage of students at or above the national average on the ACT= $16.8+ (.80 * .61)+(.80 * -.340)$. The results of this formula for parents agreeing with the statement at eighty percent would be to see a rise in student ACT scores to 20.9 percent at or above the national average. The results of the

formula for faculty agreement with the statement would be to see a decrease in student ACT scores to 14.1 percent at or above the national average.

In other words, for every one percent increase in parental agreement that their child is treated fairly in school one could expect a .61 percent increase in students scoring at or above the national average on the ACT. The relationship of faculty perceptions of students being treated fairly to students scoring at or above the national average on the ACT is expressed as follows; for every one percent increase in faculty agreeing that there is a sense of belonging in their school one could expect ACT scores at or above the national average to decrease by .340 percent.

Both faculty and parent perceptions of students being treated fairly are predictors of students scoring at or above the national average, however as parent perception of fairness increases, ACT scores increase and as faculty percentage of agreement increases, ACT scores decrease.

Table 12.
Summary of Regression Analysis Results for DESE AQ "Students are Treated Fairly"

R=Correlation	R2	SEE	Durbin-Watson	Significance
.47	.217	10.9	1.87	.000*
Regression	Coefficient			
Constant	16.8	11.0		.132
% of parents	.61	.122		.000*
% of students	-.070			.500
% of faculty	-.340	.116		.004*

Note: Alpha ≤ 0.10

Appendix P

Regression Summary Analysis for Respect

As shown in Table 12., there was a significant, multiple, step-wise regression model found. The model was the percent of students scoring at or above the national average on the ACT= $4.2+(\%parents * .53)+(\%students * \text{no significant practicality})+(\%faculty * \text{no significant practicality})$. This equation has the following limitations; the R2 is .16, or only sixteen percent practicality; the Durbin-Watson is 1.86 which is acceptable according to Field (2005).

These findings suggest that parent perceptions of students being treated with respect are a very important predictor of students scoring at or above the national average on the ACT with a statistical significance of Alpha=.000. Faculty and student perceptions of students being treated with respect have no statistically significant way of creating a predictive model of ACT scores.

Utilizing the aforementioned formula, if the percentage of parents agreeing with the statement that their child is treated fairly at school is eighty percent then the formula would yield the following; Percentage of students at or above the national average on the ACT= $4.2+ (.80 * .533)$. The results of this formula for parents agreeing with the statement at eighty percent would more than double the percentage of students scoring at or above the national average on ACT scores to 8.5 percent.

In other words, for every one percent increase in parental agreement that their child is treated with respect in school one could expect a .533 percent increase in students scoring at or above the national average on the ACT.

Parent perceptions of students being treated with respect at school are predictors of students scoring at or above the national average. No predictive model could be constructed for student and faculty perceptions of students being treated with respect at school and ACT scores.

Table 12.
Summary of Regression Analysis Results for DESE AQ “Students are Treated with Respect”

R=Correlation	R2	SEE	Durbin-Watson	Significance
.402	.161	11.28	1.86	.000
Regression	Coefficient			
Constant	4.20	8.91		.638
% of parents	.533	.126		.000*
% of students	-.155	.128		.227
% of faculty	-.059			.545

Note: Alpha \leq 0.10*

Appendix Q

Safety AQ Data

School	Question	% students at/above ACT	% parent agree	% student agree	% staff agree
Adair Co. R-1 001090	Safety	20.6	91.1	66.4	100
Kirksville R-III-001091	Safety	45.5	82.8	73	93.7
Mexico 59	Safety	46.4	61.9	62.5	94.9
Miami R-I	Safety	27.3	81	76.9	90.9
Warsaw R-IX	Safety	18.2	64	56.3	95.5
Woodland R-IV	Safety	17.7	70.7	63.7	90
Sturgeon R-V	Safety	15.6	75.8	79.1	100
Harrisburg R-VIII	Safety	29.7	81.8	78.8	93.3
Columbia 93	Safety	53.2	81.4	61.6	92.6
Buchanan Co R-IV	Safety	23.7	78.2	81.4	100
South Calloway Co. R-II	Safety	29.6	79.5	62.6	100
Harrisonville R-IX	Safety	36.4	78.9	69.2	96.7
Cameron R-I	Safety	35.9	71.2	62.5	96.9
Jefferson City	Safety	47.3	77.8	54.2	94.1
Lockwood R-I	Safety	45.9	89.8	86.8	100
North Daviess R-III	Safety	9.1	78.1	63.8	100
Maysville R-I	Safety	28.9	75.9	72.7	100
Meramec Valley R-III	Safety	26.9	79.8	52.8	91.2
Gasconade Co R-I	Safety	35.5	88.4	72.7	98.9
King City R-I	Safety	48.3	88.2	65.4	93.4
South Harrison R-II	Safety	38	79.6	61.5	97.2
Gilman City R-IV	Safety	57.1	81.5	81.8	92.8
Montrose R-XIV	Safety	33.3	96	80.5	100
Hickory County R-I	Safety	43.9	82.5	71.8	95.6
Craig R-III	Safety	25	90.5	88.7	100
Fayette R-III	Safety	35.2	84.6	61	100
South Iron Co. R-I	Safety	17.1	83.7	74.3	100
Lone Jack C-6	Safety	35.7	84.2	66.8	100
Carthage R-IX	Safety	38.4	61.5	66.3	70
Webb City R-VII	Safety	33.2	80.1	63.7	100
Northwest R-I	Safety	33.5	71.8	60.6	96.8
Desoto 73	Safety	27.1	73.1	58.2	92.8
Kingsville R-I	Safety	25.9	85.7	72	92.8
Chilhowee R-IV	Safety	10	77.8	73.3	85.8
Laclede Co R-I	Safety	28.6	87	85.5	100
Odessa R-VII	Safety	27	75	63.7	98.2
Lexington R-V	Safety	33.7	70.3	52.6	100
Aurora R-VIII	Safety	33.9	64.8	55.3	95.5
Verona R-VII	Safety	16.7	75.9	52	100
Troy R-III	Safety	34.8	91	72.6	97.3
Brookfield R-III	Safety	21.3	91.2	70.5	95.7
McDonald co R-I	Safety	17	61.5	60.9	95.1
St. Elizabeth R-IV	Safety	57.1	95.7	90.7	100
Tipton R-VI	Safety	49	79.7	57.3	100

Portageville	Safety	28.8	71.5	58.9	100
Gideon 37	Safety	22.2	86.1	75.2	100
Seneca R-VII	Safety	36.7	81.8	66	100
Neosho R-V	Safety	31.5	59.7	46.3	93
Nodaway Holt R-VII	Safety	38.9	89	71.3	100
West Nodaway	Safety	33.3	82	60.8	95.6
Northeast Nodaway R-V	Safety	23.5	92	72	100
North Nodaway R-VI	Safety	29.2	92.6	65.3	94.4
South Nodaway R-IV	Safety	33.3	97.2	94.8	100
Couch R-I	Safety	42.1	91.2	73.8	100
Thayer R-II	Safety	37.5	69.3	51.5	95.8
Osage Co R-II	Safety	35.8	74	54.5	91.7
La Monte R-IV	Safety	41.2	88	57.9	100
Green Ridge R-VIII	Safety	46.7	87	70.9	100
Sedalia 200	Safety	35.8	62.4	42.9	72.2
Newburg R-II	Safety	18.2	81.8	56.8	100
Lousiana R-II	Safety	31.5	70.4	63.7	100
North Platte R-I	Safety	57.1	84.8	77.1	100
Fair Play R-II	Safety	9.1	85.7	70.3	100
Halfway R-III	Safety	21.1	96.3	46	100
Putnam Co. R-I	Safety	27.8	74.5	67.6	100
Ralls Co. R-II	Safety	37.5	77.1	59.9	100
Higbee R-VIII	Safety	15.8	96.2	71.5	100
Bunker R-III	Safety	29.2	78.6	84.3	100
Naylor R-II	Safety	21.4	92.9	73.2	100
Doniphan R-I	Safety	23.6	51.3	63.7	94.3
Lakeland R-III	Safety	15.4	74.7	48	93.8
Bismarck R-V	Safety	13.8	78.3	68.1	95.3
Central R-III	Safety	32.3	83.6	88.1	100
West St. Francois Co R-IV	Safety	14.8	85.2	87.9	100
Rockwood R-VI	Safety	64.1	89.4	70.6	97.6
Ladue	Safety	71.8	92.5	72.4	96
Maplewood-Richmond Hts	Safety	20.6	82.2	47.9	83.9
Ritenour	Safety	23.7	77.4	44.2	89.4
Schuyler Co R-I	Safety	39.5	81	55.9	95
Scott City R-I	Safety	35.2	69.4	64.9	100
Shelby Co R-IV	Safety	36.6	81.2	62.1	100
Richland R-I	Safety	33.3	72.9	62	100
Puxico R-VIII	Safety	26.2	85.8	65	100
Galena R-II	Safety	25	74.8	75.6	100
Crane R-III	Safety	10.3	80.2	79.6	95.2
Reed Springs R-IV	Safety	36.7	78.9	65.6	92.3
Blue Eye R-V	Safety	16.7	82.5	76.4	94.1
Milan C-2	Safety	30	54.4	39	70
Hollister R-V	Safety	28.4	73	60.6	100
Nevada R-V	Safety	29.5	76.5	61.6	97.3
Kingston K-14	Safety	12.7	70.4	60	100
Potosi R-III	Safety	17.3	76.3	64.8	97.6
Clearwater R-I	Safety	25.3	70.4	52.4	100

Marshfield R-I	Safety	34.1	73.9	55.4	90.6
Worth County R-III	Safety	31	92.7	71.2	94.4
Norwood R-I	Safety	19.4	85.7	69.5	100
Hartville R-II	Safety	19.6	90.3	68.5	100
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Total		30.78659794	79.87628866	66.36597938	96.3628866

Appendix R

Fairness Data

School	Question	% students at/above ACT	% parent agree	% student agree	% staff agree
Adair Co. R-1 001090	Fairness	20.6	70.6	54.3	82.4
Kirksville R-III-001091	Fairness	45.5	76.3	65.1	89.3
Mexico 59	Fairness	46.4	64	57.2	82.1
Miami R-I	Fairness	27.3	71.4	70.1	83.3
Warsaw R-IX	Fairness	18.2	59.8	56	90.5
Woodland R-IV	Fairness	17.7	64.1	54.5	75
Sturgeon R-V	Fairness	15.6	69.4	70.1	100
Harrisburg R-VIII	Fairness	29.7	84.5	74	100
Columbia 93	Fairness	53.2	84.6	63.5	90.4
Buchanan Co R-IV	Fairness	23.7	60.5	72.3	90
South Calloway Co. R-II	Fairness	29.6	78.7	66.7	83.4
Harrisonville R-IX	Fairness	36.4	80.4	56.2	89.6
Cameron R-I	Fairness	35.9	59.1	56.1	81.3
Jefferson City	Fairness	47.3	81.6	55.7	90
Lockwood R-I	Fairness	45.9	76.9	70.5	92.9
North Daviess R-III	Fairness	9.1	46.9	46.8	71.4
Maysville R-I	Fairness	28.9	53.6	56.7	60
Meramec Valley R-III	Fairness	26.9	78.6	52	88.2
Gasconade Co R-I	Fairness	35.5	79.4	58.7	96.8
King City R-I	Fairness	48.3	86.5	51.3	86.6
South Harrison R-II	Fairness	38	66.4	53.9	88.6
Gilman City R-IV	Fairness	57.1	77.8	61.1	78.6
Montrose R-XIV	Fairness	33.3	80.7	70.7	100
Hickory County R-I	Fairness	43.9	73.3	67	91.3
Craig R-III	Fairness	25	80.5	80.3	93.8
Fayette R-III	Fairness	35.2	78.4	62.7	92.8
South Iron Co. R-I	Fairness	17.1	74.2	69	100
Lone Jack C-6	Fairness	35.7	74.1	49.8	78.9
Carthage R-IX	Fairness	38.4	77.2	70	76
Webb City R-VII	Fairness	33.2	78.2	56.2	100
Northwest R-I	Fairness	33.5	73.4	60.4	91.2
Desoto 73	Fairness	27.1	65	57.2	85.5
Kingsville R-I	Fairness	25.9	83.4	57.3	85.8
Chilhowee R-IV	Fairness	10	61.1	58.3	100
Laclede Co R-I	Fairness	28.6	80.2	82.3	86.3
Odessa R-VII	Fairness	27	76.2	59.7	94.5
Lexington R-V	Fairness	33.7	59.2	53.3	76.2
Aurora R-VIII	Fairness	33.9	61.3	58.9	95.4
Verona R-VII	Fairness	16.7	59	48.5	95.4
Troy R-III	Fairness	34.8	92.8	67.5	89.5
Brookfield R-III	Fairness	21.3	87.9	63.5	91.3
McDonald co R-I	Fairness	17	65.9	64	88.8
St. Elizabeth R-IV	Fairness	57.1	83	66.2	72
Tipton R-VI	Fairness	49	73.3	55.1	88.4

Portageville	Fairness	28.8	67.6	44.4	84
Gideon 37	Fairness	22.2	81.2	67.2	100
Seneca R-VII	Fairness	36.7	71.4	56.8	80
Neosho R-V	Fairness	31.5	63.9	45.2	81.4
Nodaway Holt R-VII	Fairness	38.9	71.2	61.6	90.8
West Nodaway	Fairness	33.3	69.4	59.1	95.7
Northeast Nodaway R-V	Fairness	23.5	72.7	53.2	93.8
North Nodaway R-VI	Fairness	29.2	74.1	58.3	100
South Nodaway R-IV	Fairness	33.3	86	81.3	78.6
Couch R-I	Fairness	42.1	84.4	71.4	93.1
Thayer R-II	Fairness	37.5	73.8	48.9	91.7
Osage Co R-II	Fairness	35.8	66.4	48.5	70.8
La Monte R-IV	Fairness	41.2	74	59.3	84.2
Green Ridge R-VIII	Fairness	46.7	73.9	60.1	88.2
Sedalia 200	Fairness	35.8	80.2	67.4	77.8
Newburg R-II	Fairness	18.2	71.2	53.3	100
Lousiana R-II	Fairness	31.5	62.1	47.9	83.4
North Platte R-I	Fairness	57.1	69.5	63.2	86.4
Fair Play R-II	Fairness	9.1	74.1	59.5	93.3
Halfway R-III	Fairness	21.1	74.1	43.9	93.7
Putnam Co. R-I	Fairness	27.8	65.6	54.5	82.6
Ralls Co. R-II	Fairness	37.5	63.4	55.8	90.9
Higbee R-VIII	Fairness	15.8	78.9	64.2	100
Bunker R-III	Fairness	29.2	63.9	77.6	85.7
Naylor R-II	Fairness	21.4	82.4	65.6	83.3
Doniphan R-I	Fairness	23.6	56.1	53.5	100
Lakeland R-III	Fairness	15.4	54.7	36.3	84.6
Bismarck R-V	Fairness	13.8	63.8	69.7	100
Central R-III	Fairness	32.3	78.5	80.7	93.1
West St. Francois Co R-IV	Fairness	14.8	73.3	82.8	100
Rockwood R-VI	Fairness	64.1	89.6	63.6	89.7
Ladue	Fairness	71.8	88.9	65.4	86.1
Maplewood-Richmond Hts	Fairness	20.6	89.1	58.8	74.2
Ritenour	Fairness	23.7	79.5	48.3	81.7
Schuyler Co R-I	Fairness	39.5	64.2	53.6	80
Scott City R-I	Fairness	35.2	74.2	58.9	96.2
Shelby Co R-IV	Fairness	36.6	73	48.3	84.6
Richland R-I	Fairness	33.3	68.3	61.6	76.9
Puxico R-VIII	Fairness	26.2	72.4	56.8	92
Galena R-II	Fairness	25	61.4	57.9	73.7
Crane R-III	Fairness	10.3	70.9	62.7	85.7
Reed Springs R-IV	Fairness	36.7	72.4	60.4	89.7
Blue Eye R-V	Fairness	16.7	79.3	64.4	93.8
Milan C-2	Fairness	30	53	44.4	43.3
Hollister R-V	Fairness	28.4	63.5	57.5	54.7
Nevada R-V	Fairness	29.5	68.5	55.2	91.9
Kingston K-14	Fairness	12.7	46.6	54.2	69.6
Potosi R-III	Fairness	17.3	67	59.9	87.8
Clearwater R-I	Fairness	25.3	65.5	47.6	74.2

Marshfield R-I	Fairness	34.1	71.5	43.6	84.6
Worth County R-III	Fairness	31	72.8	62.1	76.4
Norwood R-I	Fairness	19.4	57.2	53.4	94.1
Hartville R-II	Fairness	19.6	84.1	63.7	100
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Total		30.78659794	72.00103093	59.73402062	86.92268041

Appendix S

Caring Data

School	Question	% students at/above ACT	% parent agree	% student agree	% staff agree
Adair Co. R-1 001090	Caring	20.6	64.7	48.2	100
Kirksville R-III-001091	Caring	45.5	53.2	39.3	95.8
Mexico 59	Caring	46.4	43.2	35.7	92.3
Miami R-I	Caring	27.3	52.4	55.2	90.9
Warsaw R-IX	Caring	18.2	49.7	38.9	95.3
Woodland R-IV	Caring	17.7	50	46.8	90
Sturgeon R-V	Caring	15.6	56.5	54	90.9
Harrisburg R-VIII	Caring	29.7	70.4	57.7	100
Columbia 93	Caring	53.2	76.6	49.1	96.9
Buchanan Co R-IV	Caring	23.7	45.3	56.1	100
South Calloway Co. R-II	Caring	29.6	70.3	48.9	87.5
Harrisonville R-IX	Caring	36.4	52.5	55.1	96.7
Cameron R-I	Caring	35.9	48.5	38.1	100
Jefferson City	Caring	47.3	73.8	42.9	96.1
Lockwood R-I	Caring	45.9	58.9	48.8	100
North Daviess R-III	Caring	9.1	48.4	38.3	93.4
Maysville R-I	Caring	28.9	50	49.9	100
Meramec Valley R-III	Caring	26.9	67.8	39.8	94.9
Gasconade Co R-I	Caring	35.5	67.4	40.2	98.9
King City R-I	Caring	48.3	72.4	44.4	100
South Harrison R-II	Caring	38	49.5	34.7	100
Gilman City R-IV	Caring	57.1	70.4	51.3	92.8
Montrose R-XIV	Caring	33.3	56	57.5	100
Hickory County R-I	Caring	43.9	65.3	51.6	95.7
Craig R-III	Caring	25	69	67.8	100
Fayette R-III	Caring	35.2	64.1	47.7	96.4
South Iron Co. R-I	Caring	17.1	60.2	55.2	100
Lone Jack C-6	Caring	35.7	61.4	38.2	94.8
Carthage R-IX	Caring	38.4	65	48.5	96
Webb City R-VII	Caring	33.2	68.5	44.5	100
Northwest R-I	Caring	33.5	54.5	38	97.6
Desoto 73	Caring	27.1	47.7	33.9	92.8
Kingsville R-I	Caring	25.9	73.5	43.8	85.8
Chilhowee R-IV	Caring	10	50	44	100
Laclede Co R-I	Caring	28.6	64	65.2	91
Odessa R-VII	Caring	27	59.1	45.2	98.2
Lexington R-V	Caring	33.7	50	35.8	95.3
Aurora R-VIII	Caring	33.9	44.1	43.2	95.4
Verona R-VII	Caring	16.7	49.2	41.6	100
Troy R-III	Caring	34.8	84	52.1	94.7
Brookfield R-III	Caring	21.3	66.6	39.5	91.3
McDonald co R-I	Caring	17	47	36.5	95.2
St. Elizabeth R-IV	Caring	57.1	78.7	42.9	100
Tipton R-VI	Caring	49	65.1	46.5	96.1

Portageville	Caring	28.8	49.3	34.3	92
Gideon 37	Caring	22.2	71.3	56.2	100
Seneca R-VII	Caring	36.7	66.3	40.6	100
Neosho R-V	Caring	31.5	45.9	27.7	93
Nodaway Holt R-VII	Caring	38.9	61.7	45	100
West Nodaway	Caring	33.3	64	51.7	100
Northeast Nodaway R-V	Caring	23.5	64.3	38.7	87.5
North Nodaway R-VI	Caring	29.2	66.7	49.6	100
South Nodaway R-IV	Caring	33.3	76	76.1	92.9
Couch R-I	Caring	42.1	72.6	57.3	100
Thayer R-II	Caring	37.5	65.1	37.9	95.8
Osage Co R-II	Caring	35.8	60.6	35.3	91.7
La Monte R-IV	Caring	41.2	64	43.5	100
Green Ridge R-VIII	Caring	46.7	65.7	40.7	94.1
Sedalia 200	Caring	35.8	67	48	86.1
Newburg R-II	Caring	18.2	58	28.9	100
Lousiana R-II	Caring	31.5	43.7	34	91.7
North Platte R-I	Caring	57.1	58.4	50.9	90.9
Fair Play R-II	Caring	9.1	66.3	55.7	93.3
Halfway R-III	Caring	21.1	77.8	45	93.7
Putnam Co. R-I	Caring	27.8	61.9	44.4	100
Ralls Co. R-II	Caring	37.5	53.6	38.7	100
Higbee R-VIII	Caring	15.8	80.8	54.2	100
Bunker R-III	Caring	29.2	54.5	69.4	100
Naylor R-II	Caring	21.4	72.4	57.2	100
Doniphan R-I	Caring	23.6	35.3	36.3	100
Lakeland R-III	Caring	15.4	44.7	31.6	87.5
Bismarck R-V	Caring	13.8	54.1	58.2	100
Central R-III	Caring	32.3	59	69.6	100
West St. Francois Co R-IV	Caring	14.8	57.9	74	100
Rockwood R-VI	Caring	64.1	81.7	46.6	97.6
Ladue	Caring	71.8	78.8	46.2	93
Maplewood-Richmond Hts	Caring	20.6	86.2	47.6	100
Ritenour	Caring	23.7	77.8	41.8	96.5
Schuyler Co R-I	Caring	39.5	55.3	39.1	95
Scott City R-I	Caring	35.2	57.7	45	91.7
Shelby Co R-IV	Caring	36.6	62.3	31.9	92.4
Richland R-I	Caring	33.3	62.5	40.5	92.4
Puxico R-VIII	Caring	26.2	66.2	43.5	95.9
Galena R-II	Caring	25	44.5	50.8	89.5
Crane R-III	Caring	10.3	43.4	43.3	100
Reed Springs R-IV	Caring	36.7	56.7	43.6	94.8
Blue Eye R-V	Caring	16.7	71.2	48.9	100
Milan C-2	Caring	30	50	34	90
Hollister R-V	Caring	28.4	50	33.3	100
Nevada R-V	Caring	29.5	54.3	46.3	100
Kingston K-14	Caring	12.7	35.5	42	91.3
Potosi R-III	Caring	17.3	55.1	42	100
Clearwater R-I	Caring	25.3	50.3	39.4	93.5

Marshfield R-I	Caring	34.1	57.4	31.4	96.2
Worth County R-III	Caring	31	66.1	55.7	94.4
Norwood R-I	Caring	19.4	76.9	38.5	100
Hartville R-II	Caring	19.6	72.2	53.8	100
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Total		30.78659794	60.67938144	45.86082474	96.11443299

Appendix T

Belonging Data

School	Question	% students at/above ACT	% parent agree	% student agree	% staff agree
Adair Co. R-1 001090	Belonging	20.6	61.7	55.7	100
Kirksville R-III-001091	Belonging	45.5	61.6	57	85.1
Mexico 59	Belonging	46.4	54.3	49.8	82
Miami R-I	Belonging	27.3	76.2	75.5	81.8
Warsaw R-IX	Belonging	18.2	54.9	51.5	85.7
Woodland R-IV	Belonging	17.7	50	50.8	80
Sturgeon R-V	Belonging	15.6	50.7	65.2	100
Harrisburg R-VIII	Belonging	29.7	82.2	66.3	93.3
Columbia 93	Belonging	53.2	76.3	58.6	94.3
Buchanan Co R-IV	Belonging	23.7	58.3	67.1	90
South Calloway Co. R-II	Belonging	29.6	62.9	49.8	79.2
Harrisonville R-IX	Belonging	36.4	70.2	56.6	86.7
Cameron R-I	Belonging	35.9	49.4	46	71.9
Jefferson City	Belonging	47.3	73.1	50	90.5
Lockwood R-I	Belonging	45.9	71.8	65.6	92.9
North Daviess R-III	Belonging	9.1	51.6	48.9	73.3
Maysville R-I	Belonging	28.9	50.6	52.8	64
Meramec Valley R-III	Belonging	26.9	68.1	46.9	80.3
Gasconade Co R-I	Belonging	35.5	72	55.4	96.8
King City R-I	Belonging	48.3	82.5	48.1	86.7
South Harrison R-II	Belonging	38	54.9	45.9	97.1
Gilman City R-IV	Belonging	57.1	77.8	60.3	85.7
Montrose R-XIV	Belonging	33.3	57.7	53.7	75
Hickory County R-I	Belonging	43.9	72.6	60.3	95.7
Craig R-III	Belonging	25	73.2	78.7	93.8
Fayette R-III	Belonging	35.2	78.4	54.6	92.9
South Iron Co. R-I	Belonging	17.1	72	64.2	100
Lone Jack C-6	Belonging	35.7	71.9	45.5	89.5
Carthage R-IX	Belonging	38.4	63.4	58.1	76
Webb City R-VII	Belonging	33.2	73.8	50	100
Northwest R-I	Belonging	33.5	55.6	48.8	88.8
Desoto 73	Belonging	27.1	85.9	46.9	82.1
Kingsville R-I	Belonging	25.9	85.7	54.8	85.7
Chilhowee R-IV	Belonging	10	55.6	51.6	85.7
Laclede Co R-I	Belonging	28.6	73.2	70.8	95.5
Odessa R-VII	Belonging	27	61.2	49.4	92.8
Lexington R-V	Belonging	33.7	55.5	46.8	90.5
Aurora R-VIII	Belonging	33.9	57.7	51.1	88.4
Verona R-VII	Belonging	16.7	55.3	49.2	68.2
Troy R-III	Belonging	34.8	87.8	62.9	97.3
Brookfield R-III	Belonging	21.3	71.9	55.8	86.9
McDonald co R-I	Belonging	17	55.1	52.2	93.5
St. Elizabeth R-IV	Belonging	57.1	78.7	68.2	84
Tipton R-VI	Belonging	49	63.3	52.3	80.8

Portageville	Belonging	28.8	63.4	38.8	84
Gideon 37	Belonging	22.2	76.3	63	100
Seneca R-VII	Belonging	36.7	62.7	53.7	96
Neosho R-V	Belonging	31.5	49.4	34.1	74.4
Nodaway Holt R-VII	Belonging	38.9	63	55.8	100
West Nodaway	Belonging	33.3	63.1	55.4	91.3
Northeast Nodaway R-V	Belonging	23.5	72.8	50.4	62.5
North Nodaway R-VI	Belonging	29.2	62.2	59.5	72.2
South Nodaway R-IV	Belonging	33.3	91.5	87.3	85.7
Couch R-I	Belonging	42.1	84.6	70.7	94.8
Thayer R-II	Belonging	37.5	67	47.9	91.7
Osage Co R-II	Belonging	35.8	62.8	47.6	70.9
La Monte R-IV	Belonging	41.2	64	47.5	94.8
Green Ridge R-VIII	Belonging	46.7	79.4	59.3	70.6
Sedalia 200	Belonging	35.8	62.7	43.9	66.7
Newburg R-II	Belonging	18.2	70.4	46.3	95.7
Lousiana R-II	Belonging	31.5	51.1	46.2	83.3
North Platte R-I	Belonging	57.1	66.1	62.4	81.8
Fair Play R-II	Belonging	9.1	67.6	63	93.3
Halfway R-III	Belonging	21.1	77.8	48.7	93.8
Putnam Co. R-I	Belonging	27.8	65.2	55.6	95.7
Ralls Co. R-II	Belonging	37.5	56.4	47.7	95.4
Higbee R-VIII	Belonging	15.8	86.6	57.6	100
Bunker R-III	Belonging	29.2	66.6	71.6	100
Naylor R-II	Belonging	21.4	80.7	56.4	100
Doniphan R-I	Belonging	23.6	41.8	45.2	94.3
Lakeland R-III	Belonging	15.4	50.7	36.5	75
Bismarck R-V	Belonging	13.8	66.7	60.3	100
Central R-III	Belonging	32.3	81.9	75	100
West St. Francois Co R-IV	Belonging	14.8	70	72.6	100
Rockwood R-VI	Belonging	64.1	82.1	56.9	93
Ladue	Belonging	71.8	81.5	52.9	82
Maplewood-Richmond Hts	Belonging	20.6	87.6	53	83.9
Ritenour	Belonging	23.7	72.9	44.6	88.6
Schuyler Co R-I	Belonging	39.5	59	45.5	90
Scott City R-I	Belonging	35.2	63.4	51.7	88.4
Shelby Co R-IV	Belonging	36.6	64.8	47	69.2
Richland R-I	Belonging	33.3	73.1	57.9	76.9
Puxico R-VIII	Belonging	26.2	61.7	51.5	92
Galena R-II	Belonging	25	52.8	61.7	78.9
Crane R-III	Belonging	10.3	61.8	63.5	85.7
Reed Springs R-IV	Belonging	36.7	64.7	53.3	76.9
Blue Eye R-V	Belonging	16.7	77.3	52.5	94.1
Milan C-2	Belonging	30	49.3	44.1	53.4
Hollister R-V	Belonging	28.4	48.6	49.7	92.6
Nevada R-V	Belonging	29.5	59.3	47.6	83.8
Kingston K-14	Belonging	12.7	34.2	44.3	78.2
Potosi R-III	Belonging	17.3	62	49.5	94.9
Clearwater R-I	Belonging	25.3	54.2	43	82.9

Marshfield R-I	Belonging	34.1	59.2	36.3	84.9
Worth County R-III	Belonging	31	74.1	56.9	77.8
Norwood R-I	Belonging	19.4	85.7	53.4	94.2
Hartville R-II	Belonging	19.6	70.8	59.9	100
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Total		30.78659794	66.40412371	54.49896907	87.0783505

Appendix U

Discipline Data

School	Question	% students at/above ACT	% parent agree	% student agree	% staff agree
Adair Co. R-1 001090	Discipline	20.6	64.7	46.5	94.1
Kirksville R-III-001091	Discipline	45.5	57	52.2	66
Mexico 59	Discipline	46.4	41.9	35.4	79.5
Miami R-I	Discipline	27.3	35.8	51.7	90.9
Warsaw R-IX	Discipline	18.2	43.8	45.2	85.7
Woodland R-IV	Discipline	17.7	46.2	42.9	75
Sturgeon R-V	Discipline	15.6	54.8	49.2	100
Harrisburg R-VIII	Discipline	29.7	60.5	73.1	100
Columbia 93	Discipline	53.2	65.6	50.2	82.1
Buchanan Co R-IV	Discipline	23.7	53.2	56	90
South Calloway Co. R-II	Discipline	29.6	60.1	51.6	75
Harrisonville R-IX	Discipline	36.4	55.4	50	84.6
Cameron R-I	Discipline	35.9	36.3	25.1	87.5
Jefferson City	Discipline	47.3	62.3	42.6	75.7
Lockwood R-I	Discipline	45.9	59	62.3	85.7
North Daviess R-III	Discipline	9.1	41.9	36.1	73.3
Maysville R-I	Discipline	28.9	32.2	42.6	58.3
Meramec Valley R-III	Discipline	26.9	59.9	39	76.4
Gasconade Co R-I	Discipline	35.5	64.9	49.6	93.6
King City R-I	Discipline	48.3	52.7	40.3	66.7
South Harrison R-II	Discipline	38	46.3	50.1	94.5
Gilman City R-IV	Discipline	57.1	59.2	43.6	71.4
Montrose R-XIV	Discipline	33.3	36	47.5	100
Hickory County R-I	Discipline	43.9	62.7	66.2	91.3
Craig R-III	Discipline	25	61.9	79	87.5
Fayette R-III	Discipline	35.2	66.1	42.1	100
South Iron Co. R-I	Discipline	17.1	59.5	67.7	100
Lone Jack C-6	Discipline	35.7	59.5	37	89.5
Carthage R-IX	Discipline	38.4	57.8	59.3	77.7
Webb City R-VII	Discipline	33.2	62.4	38.2	100
Northwest R-I	Discipline	33.5	50.6	43.8	83.1
Desoto 73	Discipline	27.1	54.1	40.8	74.6
Kingsville R-I	Discipline	25.9	69.4	51.9	92.8
Chilhowee R-IV	Discipline	10	38.9	46.6	100
Laclede Co R-I	Discipline	28.6	66.7	68.9	85.7
Odessa R-VII	Discipline	27	51.1	46.6	95.5
Lexington R-V	Discipline	33.7	42.3	40.6	76.2
Aurora R-VIII	Discipline	33.9	42.4	42.4	90.9
Verona R-VII	Discipline	16.7	42.4	27.2	68.2
Troy R-III	Discipline	34.8	80.8	57.1	86.8
Brookfield R-III	Discipline	21.3	64.9	55.9	91.3
McDonald co R-I	Discipline	17	55.7	65.7	85.4
St. Elizabeth R-IV	Discipline	57.1	72.3	60.9	72
Tipton R-VI	Discipline	49	63	56.3	84.6

Portageville	Discipline	28.8	43.7	32.3	88
Gideon 37	Discipline	22.2	71.3	65	88.3
Seneca R-VII	Discipline	36.7	51.5	43.5	92
Neosho R-V	Discipline	31.5	43.4	28.7	71.5
Nodaway Holt R-VII	Discipline	38.9	64.3	56.9	91
West Nodaway	Discipline	33.3	48.7	35.6	82.6
Northeast Nodaway R-V	Discipline	23.5	60.2	50.5	75.1
North Nodaway R-VI	Discipline	29.2	61.1	47.2	94.5
South Nodaway R-IV	Discipline	33.3	70	79.2	78.6
Couch R-I	Discipline	42.1	77.6	69.1	94.4
Thayer R-II	Discipline	37.5	67.3	48.1	79.2
Osage Co R-II	Discipline	35.8	43.9	36.6	58.3
La Monte R-IV	Discipline	41.2	52	50.7	68.4
Green Ridge R-VIII	Discipline	46.7	63.7	39.9	70.6
Sedalia 200	Discipline	35.8	50.5	44.8	63.9
Newburg R-II	Discipline	18.2	63	41.7	100
Lousiana R-II	Discipline	31.5	49.3	37.7	95.9
North Platte R-I	Discipline	57.1	56.7	44.4	63.7
Fair Play R-II	Discipline	9.1	57.2	60.6	93.3
Halfway R-III	Discipline	21.1	70.4	36.2	100
Putnam Co. R-I	Discipline	27.8	49.5	38.2	69.6
Ralls Co. R-II	Discipline	37.5	43.6	32.1	86.3
Higbee R-VIII	Discipline	15.8	61.5	54.7	100
Bunker R-III	Discipline	29.2	48.6	50	71.4
Naylor R-II	Discipline	21.4	61.4	47.3	75
Doniphan R-I	Discipline	23.6	38.8	36.1	97.2
Lakeland R-III	Discipline	15.4	43.3	24	80
Bismarck R-V	Discipline	13.8	36.1	58.6	90.5
Central R-III	Discipline	32.3	65.5	84.8	93.1
West St. Francois Co R-IV	Discipline	14.8	57.7	71.5	100
Rockwood R-VI	Discipline	64.1	71.9	46.2	74
Ladue	Discipline	71.8	62.7	40.9	71.7
Maplewood-Richmond Hts	Discipline	20.6	76.7	31.3	71
Ritenour	Discipline	23.7	60.9	37.7	62.5
Schuyler Co R-I	Discipline	39.5	43.6	85	85
Scott City R-I	Discipline	35.2	58	54.9	92.3
Shelby Co R-IV	Discipline	36.6	48.2	30.1	69.2
Richland R-I	Discipline	33.3	51.2	45	38.5
Puxico R-VIII	Discipline	26.2	53.1	51.2	92
Galena R-II	Discipline	25	46.1	49.4	89.5
Crane R-III	Discipline	10.3	54.7	67.8	61.9
Reed Springs R-IV	Discipline	36.7	58.4	47	82
Blue Eye R-V	Discipline	16.7	69	50.9	50
Milan C-2	Discipline	30	36.8	32.7	43.3
Hollister R-V	Discipline	28.4	41.5	40.6	92.3
Nevada R-V	Discipline	29.5	45.7	34.6	91.9
Kingston K-14	Discipline	12.7	26.3	21	82.6
Potosi R-III	Discipline	17.3	49.4	40.8	85.3
Clearwater R-I	Discipline	25.3	44.4	31.1	77.4

Marshfield R-I	Discipline	34.1	51.8	31	73.5
Worth County R-III	Discipline	31	54.6	46.2	50
Norwood R-I	Discipline	19.4	78.5	36.4	94.1
Hartville R-II	Discipline	19.6	60	52.5	100
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Total		30.78659794	54.94329897	47.70412371	82.28350515

Appendix V

Respect Data

School	Question	% students at/above ACT	% parent agree	% student agree	% staff agree
Adair Co. R-1 001090	Respect	20.6	73.5	63.9	100
Kirksville R-III-001091	Respect	45.5	66.7	67.4	95.7
Mexico 59	Respect	46.4	56.3	57.1	94.9
Miami R-I	Respect	27.3	63.5	71.1	90.9
Warsaw R-IX	Respect	18.2	57.4	52.8	100
Woodland R-IV	Respect	17.7	59.4	56.9	90
Sturgeon R-V	Respect	15.6	61.3	69.1	100
Harrisburg R-VIII	Respect	29.7	81.8	75	100
Columbia 93	Respect	53.2	84.1	63.7	96.7
Buchanan Co R-IV	Respect	23.7	52.1	82.6	100
South Calloway Co. R-II	Respect	29.6	69.9	64.6	95.9
Harrisonville R-IX	Respect	36.4	64.5	62	96.7
Cameron R-I	Respect	35.9	62.1	54.6	90.7
Jefferson City	Respect	47.3	79.7	55	95.9
Lockwood R-I	Respect	45.9	69.2	67.2	92.9
North Daviess R-III	Respect	9.1	56.3	51	66.6
Maysville R-I	Respect	28.9	55.5	60.8	100
Meramec Valley R-III	Respect	26.9	74.9	54.1	91.5
Gasconade Co R-I	Respect	35.5	74.8	58	96.7
King City R-I	Respect	48.3	81.4	57.7	100
South Harrison R-II	Respect	38	59.7	51.6	97.1
Gilman City R-IV	Respect	57.1	71.4	70.5	85.7
Montrose R-XIV	Respect	33.3	84	73.1	75
Hickory County R-I	Respect	43.9	72.1	66.1	91.3
Craig R-III	Respect	25	78.5	86.9	100
Fayette R-III	Respect	35.2	75.4	57.6	100
South Iron Co. R-I	Respect	17.1	70	65.1	100
Lone Jack C-6	Respect	35.7	73	52.1	94.7
Carthage R-IX	Respect	38.4	72.1	68.1	92
Webb City R-VII	Respect	33.2	75.1	56.9	100
Northwest R-I	Respect	33.5	67.9	61.7	100
Desoto 73	Respect	27.1	58.9	51.9	77.5
Kingsville R-I	Respect	25.9	73.4	59.1	85.7
Chilhowee R-IV	Respect	10	55.6	63.3	100
Laclede Co R-I	Respect	28.6	74.4	77.6	95.5
Odessa R-VII	Respect	27	70.8	64.9	96.3
Lexington R-V	Respect	33.7	53.9	57	90.5
Aurora R-VIII	Respect	33.9	62.2	58.7	97.7
Verona R-VII	Respect	16.7	54.2	53.1	95.5
Troy R-III	Respect	34.8	91.4	67	94.7
Brookfield R-III	Respect	21.3	84	62.8	91.3
McDonald co R-I	Respect	17	63.6	59.5	95.1
St. Elizabeth R-IV	Respect	57.1	82.9	72.9	100
Tipton R-VI	Respect	49	67.4	61	92.3

Portageville	Respect	28.8	56.4	47.7	88
Gideon 37	Respect	22.2	73.2	74.2	100
Seneca R-VII	Respect	36.7	67.7	61	100
Neosho R-V	Respect	31.5	54.1	44.3	97.7
Nodaway Holt R-VII	Respect	38.9	60.2	66	100
West Nodaway	Respect	33.3	64	47	100
Northeast Nodaway R-V	Respect	23.5	61.4	54.7	93.8
North Nodaway R-VI	Respect	29.2	63	53.5	94.4
South Nodaway R-IV	Respect	33.3	76.1	85.5	92.9
Couch R-I	Respect	42.1	74.2	70	100
Thayer R-II	Respect	37.5	69.9	42.9	91.6
Osage Co R-II	Respect	35.8	64.4	48.1	95.9
La Monte R-IV	Respect	41.2	72	57.9	100
Green Ridge R-VIII	Respect	46.7	72.1	54.5	88.3
Sedalia 200	Respect	35.8	79.1	63.3	88.6
Newburg R-II	Respect	18.2	61.4	42.3	100
Lousiana R-II	Respect	31.5	49.3	46.6	95.8
North Platte R-I	Respect	57.1	68.4	63	95.4
Fair Play R-II	Respect	9.1	57.2	64.7	93.3
Halfway R-III	Respect	21.1	74.1	54.9	100
Putnam Co. R-I	Respect	27.8	69.1	58.2	100
Ralls Co. R-II	Respect	37.5	54.9	44.7	90.5
Higbee R-VIII	Respect	15.8	78.9	56.3	100
Bunker R-III	Respect	29.2	67.9	77.8	100
Naylor R-II	Respect	21.4	72.4	63.6	100
Doniphan R-I	Respect	23.6	44.8	47.8	96.2
Lakeland R-III	Respect	15.4	53.7	39.6	87.6
Bismarck R-V	Respect	13.8	63.9	65.7	100
Central R-III	Respect	32.3	73.1	82.6	100
West St. Francois Co R-IV	Respect	14.8	70.4	84	100
Rockwood R-VI	Respect	64.1	88.9	63.1	96.6
Ladue	Respect	71.8	88.6	63.6	92
Maplewood-Richmond Hts	Respect	20.6	90.4	66.3	96.8
Ritenour	Respect	23.7	82.1	54	93.6
Schuyler Co R-I	Respect	39.5	57.4	54.9	95
Scott City R-I	Respect	35.2	65.3	62.3	91.3
Shelby Co R-IV	Respect	36.6	75.2	45.9	92.3
Richland R-I	Respect	33.3	60	51.7	92.4
Puxico R-VIII	Respect	26.2	72.8	56.6	100
Galena R-II	Respect	25	61.4	60.8	84.2
Crane R-III	Respect	10.3	58.5	68	95
Reed Springs R-IV	Respect	36.7	63.8	57.6	94.9
Blue Eye R-V	Respect	16.7	72.1	63.5	100
Milan C-2	Respect	30	51.4	54.1	86.2
Hollister R-V	Respect	28.4	58.5	53.7	96.3
Nevada R-V	Respect	29.5	64	60	100
Kingston K-14	Respect	12.7	48.1	52.4	82.6
Potosi R-III	Respect	17.3	62	57.3	100
Clearwater R-I	Respect	25.3	56.5	51.7	93.6

Marshfield R-I	Respect	34.1	63.5	44.2	86.8
Worth County R-III	Respect	31	66.1	67.9	94.4
Norwood R-I	Respect	19.4	64.3	50.9	100
Hartville R-II	Respect	19.6	69.3	64.3	100

Total		30.78659794	67.46185567	60.31237113	94.81443299
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Appendix W

Student AQ

**MSIP Advanced Questionnaire
Secondary Students Frequency Distribution Report**

SOUTH NODAWAY CO. R-IV School district

Question	Strongly Agree		Agree		Neutral		Disagree		Strongly Disagree		Number Missing
	N	Pct.	N	Pct.	N	Pct.	N	Pct.	N	Pct.	
17 - The classes I have at school cover material that is important to me.	10	10.4	58	60.4	18	18.8	7	7.3	3	3.1	0
18 - I am satisfied with the variety of courses this school offers.	14	14.6	45	46.9	22	22.9	12	12.5	3	3.1	0
19 - My teachers make clear what I'm supposed to learn.	24	25.3	57	60.0	12	12.6	2	2.1	0	0.0	1
20 - The classes I took last year prepared me for this year's subjects.	23	24.2	45	47.4	22	23.2	3	3.2	2	2.1	1
21 - Most of my teachers are organized and well prepared to teach.	27	28.4	54	56.8	12	12.6	2	2.1	0	0.0	1
22 - In most classes, if I am having trouble	38	40.0	43	45.3	12	12.6	1	1.1	1	1.1	1

Question	Strongly Agree		Agree		Neutral		Disagree		Strongly Disagree		Number Missing
	N	Pct.	N	Pct.	N	Pct.	N	Pct.	N	Pct.	
learning something, my teacher usually finds another way to help me understand.											
23 - Most of my teachers inform me about my progress in their class.	30	31.3	50	52.1	12	12.5	3	3.1	1	1.0	0
24 - My teachers make learning interesting.	8	8.3	44	45.8	33	34.4	9	9.4	2	2.1	0
25 - I am given opportunities to work and learn independently.	19	19.8	59	61.5	10	10.4	7	7.3	1	1.0	0
26 - My teachers want me to contribute my thoughts in class.	25	26.0	49	51.0	17	17.7	5	5.2	0	0.0	0
27 - In my school, all students are given a chance to succeed.	44	46.3	46	48.4	2	2.1	3	3.2	0	0.0	1
28 - There is good communication between teachers and students.	29	30.2	51	53.1	11	11.5	4	4.2	1	1.0	0

Question	Strongly Agree		Agree		Neutral		Disagree		Strongly Disagree		Number Missing
	N	Pct.	N	Pct.	N	Pct.	N	Pct.	N	Pct.	
29 - I feel safe at school.	60	62.5	31	32.3	2	2.1	3	3.1	0	0.0	0
30 - There is a feeling of belonging at my school.	35	36.8	48	50.5	10	10.5	1	1.1	1	1.1	1
31 - My parents have a good idea of what goes on at school.	32	33.3	48	50.0	10	10.4	4	4.2	2	2.1	0
32 - Most teenagers around here drink a lot.	4	4.2	19	19.8	37	38.5	23	24.0	13	13.5	0
33 - Teachers in my school really care about me.	26	27.1	47	49.0	19	19.8	2	2.1	2	2.1	0
34 - I learn about other cultures in school.	11	11.6	53	55.8	21	22.1	8	8.4	2	2.1	1
35 - I am encouraged to do my best on the MAP test.	56	58.3	32	33.3	8	8.3	0	0.0	0	0.0	0
36 - I know how to find information I need to complete class projects.	28	29.2	59	61.5	7	7.3	1	1.0	1	1.0	0
37 - My teachers can assist me in using	26	27.1	53	55.2	14	14.6	0	0.0	3	3.1	0

Question	Strongly Agree		Agree		Neutral		Disagree		Strongly Disagree		Number Missing
	N	Pct.	N	Pct.	N	Pct.	N	Pct.	N	Pct.	
computers effectively.											
38 - If a student has a problem there are teachers who will listen and help.	35	36.8	55	57.9	3	3.2	2	2.1	0	0.0	1
39 - In our community people tend to trust each other.	30	32.3	48	51.6	9	9.7	5	5.4	1	1.1	3
40 - Our classes are often interrupted.	3	3.2	9	9.5	44	46.3	37	38.9	2	2.1	1
41 - Vocational education is an essential part of the district's program of studies.	16	16.8	39	41.1	37	38.9	2	2.1	1	1.1	1
42 - I have fun learning.	11	11.5	38	39.6	32	33.3	11	11.5	4	4.2	0
43 - My teachers think I can learn.	44	45.8	49	51.0	2	2.1	1	1.0	0	0.0	0
44 - The community is proud of this school.	43	44.8	44	45.8	8	8.3	1	1.0	0	0.0	0
45 - Our library has up-to-date resource materials.	33	34.4	43	44.8	12	12.5	7	7.3	1	1.0	0

Question	Strongly Agree		Agree		Neutral		Disagree		Strongly Disagree		Number Missing
	N	Pct.	N	Pct.	N	Pct.	N	Pct.	N	Pct.	
46 - Students at my school are friendly.	27	28.4	48	50.5	16	16.8	1	1.1	3	3.2	1
47 - This school is a good place to learn.	38	39.6	49	51.0	5	5.2	4	4.2	0	0.0	0
48 - My school provides me with the textbooks and learning materials I need to learn.	47	49.0	43	44.8	3	3.1	3	3.1	0	0.0	0
49 - My teachers are good teachers.	30	31.3	49	51.0	14	14.6	3	3.1	0	0.0	0
50 - My school building is in good condition.	29	30.2	54	56.3	10	10.4	3	3.1	0	0.0	0
51 - Drugs are a problem among teenagers in this community.	2	2.1	5	5.2	23	24.0	29	30.2	37	38.5	0
52 - I can get access to the internet at school when I need it.	30	31.3	55	57.3	6	6.3	2	2.1	3	3.1	0
53 - I like going to this school.	39	40.6	40	41.7	13	13.5	2	2.1	2	2.1	0
54 - My family believes that I can do well in	53	55.2	40	41.7	0	0.0	3	3.1	0	0.0	0

Question	Strongly Agree		Agree		Neutral		Disagree		Strongly Disagree		Number Missing
	N	Pct.	N	Pct.	N	Pct.	N	Pct.	N	Pct.	
school.											
55 - This community is a good place for a kid to grow up.	42	44.2	47	49.5	2	2.1	4	4.2	0	0.0	1
56 - I would attend a different school if I could.	4	4.2	5	5.3	14	14.7	31	32.6	41	43.2	1
57 - Teachers treat me with respect.	30	31.3	52	54.2	12	12.5	1	1.0	1	1.0	0
58 - All students have an equal opportunity to take the courses they want.	16	16.8	55	57.9	20	21.1	1	1.1	3	3.2	1
59 - My teachers expect very good work from me.	32	33.7	53	55.8	9	9.5	1	1.1	0	0.0	1
60 - I am treated fairly at school.	21	21.9	57	59.4	14	14.6	2	2.1	2	2.1	0
61 - I have had lessons in school on how to use computers.	23	24.0	45	46.9	14	14.6	11	11.5	3	3.1	0
62 - There is a lot of teamwork in our	22	22.9	50	52.1	22	22.9	1	1.0	1	1.0	0

Question	Strongly Agree		Agree		Neutral		Disagree		Strongly Disagree		Number Missing
	N	Pct.	N	Pct.	N	Pct.	N	Pct.	N	Pct.	
community.											
63 - Discipline is handled fairly in my school.	22	22.9	54	56.3	14	14.6	3	3.1	3	3.1	0
64 - I have been encouraged to establish career or educational goals at school.	32	33.3	52	54.2	9	9.4	3	3.1	0	0.0	0
65 - If I have a personal problem, I can talk to the counselor.	27	28.1	48	50.0	15	15.6	5	5.2	1	1.0	0
66 - My counselor has helped me create a plan to reach my educational and/or career goals.	17	17.7	24	25.0	36	37.5	11	11.5	8	8.3	0
67 - I know how to use electronic resources to locate information.	28	29.2	54	56.3	12	12.5	2	2.1	0	0.0	0

Data Collected in Fall, 2004
Tables Posted April 16, 2005
Mo Dept of Elementary & Secondary Education

Appendix X

Parent AQ

**MSIP Advanced Questionnaire
Parent Frequency Distribution Report**

SOUTH NODAWAY CO. R-IV School district

Question	Strongly Agree		Agree		Neutral		Disagree		Strongly Disagree		Number Missing
	N	Pct.	N	Pct.	N	Pct.	N	Pct.	N	Pct.	
23 - The way they teach at this school works well for my child.	29	19.1	90	59.2	26	17.1	6	3.9	1	0.7	1
24 - My child is given a fair chance to succeed at school.	36	23.8	92	60.9	15	9.9	7	4.6	1	0.7	2
25 - There are good learning materials at my child's school.	32	21.2	96	63.6	20	13.2	3	2.0	0	0.0	2
26 - My child likes attending this school.	58	38.7	78	52.0	11	7.3	3	2.0	0	0.0	3
27 - I can talk with my child's teachers or principal whenever I need.	69	45.7	75	49.7	5	3.3	1	0.7	1	0.7	2
28 - My child's school is a good place to learn.	46	30.5	94	62.3	8	5.3	3	2.0	0	0.0	2
29 - My child uses computers effectively at school.	28	19.2	80	54.8	31	21.2	7	4.8	0	0.0	7
30 - I know how well my child is doing in class.	42	27.8	94	62.3	9	6.0	6	4.0	0	0.0	2
31 - I feel my child is safe at school.	64	42.4	77	51.0	9	6.0	1	0.7	0	0.0	2

Question	Strongly Agree		Agree		Neutral		Disagree		Strongly Disagree		Number Missing
	N	Pct.	N	Pct.	N	Pct.	N	Pct.	N	Pct.	
32 - I am welcome to discuss my child's educational needs with the school.	56	37.1	85	56.3	7	4.6	2	1.3	1	0.7	2
33 - My child's school building is in good condition.	27	18.0	79	52.7	31	20.7	13	8.7	0	0.0	3
34 - The community provides enough money to for the schools to do a good job.	20	13.3	73	48.7	47	31.3	10	6.7	0	0.0	3
35 - Discipline in my child's school is handled fairly.	27	17.9	77	51.0	37	24.5	8	5.3	2	1.3	2
36 - If I could, I would send my child to a different school.	7	4.6	11	7.3	11	7.3	67	44.4	55	36.4	2
37 - In our community people tend to trust each other.	29	19.1	94	61.8	26	17.1	3	2.0	0	0.0	1
38 - The school encourages parents to be involved.	44	29.1	89	58.9	12	7.9	4	2.6	2	1.3	2
39 - The school board listens to parents concerns.	18	11.9	70	46.4	48	31.8	13	8.6	2	1.3	2
40 - It is important for students to have access to computers at school.	81	53.3	70	46.1	1	0.7	0	0.0	0	0.0	1
41 - My child has been taught in school about respect for other cultures.	20	13.2	106	70.2	22	14.6	3	2.0	0	0.0	2

Question	Strongly Agree		Agree		Neutral		Disagree		Strongly Disagree		Number Missing
	N	Pct.	N	Pct.	N	Pct.	N	Pct.	N	Pct.	
42 - The school encourages my child to do well on MAP tests.	56	37.3	90	60.0	4	2.7	0	0.0	0	0.0	3
43 - Vocational education is an essential part of the district's program of studies.	21	14.5	74	51.0	49	33.8	1	0.7	0	0.0	8
44 - My child's teacher makes learning interesting.	29	19.1	97	63.8	22	14.5	4	2.6	0	0.0	1
45 - Teachers in my child's school really care about my child.	36	23.7	79	52.0	21	13.8	12	7.9	4	2.6	1
46 - If a student in my child's school has a problem, teachers will listen and help.	27	18.0	94	62.7	24	16.0	4	2.7	1	0.7	3
47 - Teachers treat my child with respect.	30	19.7	89	58.6	28	18.4	5	3.3	0	0.0	1
48 - My child knows what he/she are supposed to be learning.	31	20.5	106	70.2	11	7.3	2	1.3	1	0.7	2
49 - My child's teacher expects very good work from my child.	36	23.8	102	67.5	12	7.9	1	0.7	0	0.0	2
50 - The school has helped my child establish educational and career goals.	16	10.6	57	37.7	68	45.0	9	6.0	1	0.7	2
51 - The guidance counselor is available to help my child if he/she has a personal	29	19.2	73	48.3	41	27.2	7	4.6	1	0.7	2

Question	Strongly Agree		Agree		Neutral		Disagree		Strongly Disagree		Number Missing
	N	Pct.	N	Pct.	N	Pct.	N	Pct.	N	Pct.	
problem.											
52 - The school has a written plan for improving student achievement	19	12.6	67	44.4	62	41.1	2	1.3	1	0.7	2
53 - What is taught at school meets the needs of my child.	23	15.2	103	68.2	22	14.6	1	0.7	2	1.3	2
54 - The school offers suggestions about how I can help my child learn at home.	30	19.9	85	56.3	28	18.5	6	4.0	2	1.3	2
55 - I am a partner with the school in my child's education.	50	32.9	85	55.9	13	8.6	3	2.0	1	0.7	1
56 - I receive information about the educational programs available to my child at school.	29	19.1	88	57.9	21	13.8	12	7.9	2	1.3	1
57 - I know what my child's teachers expect in school.	28	18.4	109	71.7	12	7.9	3	2.0	0	0.0	1
58 - The school board has high expectations for student learning.	14	9.3	94	62.7	40	26.7	2	1.3	0	0.0	3
59 - My child has fun learning.	33	21.9	94	62.3	19	12.6	4	2.6	1	0.7	2
60 - The community is proud of this school.	54	35.5	85	55.9	13	8.6	0	0.0	0	0.0	1
61 - I receive regular communications from school about how well my child is doing in school.	27	17.6	95	62.1	22	14.4	9	5.9	0	0.0	0

Question	Strongly Agree		Agree		Neutral		Disagree		Strongly Disagree		Number Missing
	N	Pct.	N	Pct.	N	Pct.	N	Pct.	N	Pct.	
62 - I believe my child can do well in school.	75	49.0	78	51.0	0	0.0	0	0.0	0	0.0	0
63 - Other children are friendly to my child.	51	33.3	88	57.5	11	7.2	3	2.0	0	0.0	0
64 - My child's teachers are good teachers.	35	23.0	100	65.8	12	7.9	4	2.6	1	0.7	1
65 - There is a feeling of belonging at my child's school.	44	28.8	93	60.8	12	7.8	4	2.6	0	0.0	0
66 - My child's teachers think my child can learn.	55	35.9	94	61.4	2	1.3	2	1.3	0	0.0	0
67 - My child is treated fairly at school.	42	27.5	88	57.5	17	11.1	4	2.6	2	1.3	0
68 - There is a lot of teamwork in our community.	36	23.8	74	49.0	34	22.5	7	4.6	0	0.0	2

Data Collected in Fall, 2004
Tables Posted April 15, 2006
Mo Dept of Elementary & Secondary Education

Appendix Y

Faculty AQ

**MSIP Advanced Questionnaire
Faculty Frequency Distribution Report
SOUTH NODAWAY CO. R-IV School district**

Question	Strongly Agree		Agree		Neutral		Disagree		Strongly Disagree		Number Missing
	N	Pct.	N	Pct.	N	Pct.	N	Pct.	N	Pct.	
6 - I have a curriculum guide for all subjects I teach.	15	62.5	8	33.3	1	4.2	0	0.0	0	0.0	2
7 - My curriculum guides provide me ways to measure whether students have attained each objective.	7	29.2	13	54.2	2	8.3	2	8.3	0	0.0	2
8 - My curriculum provides clear cross-references to all the Show-Me Standards.	10	41.7	6	25.0	5	20.8	3	12.5	0	0.0	2
9 - The curriculum guides are useful to me in designing lesson plans.	4	17.4	13	56.5	5	21.7	1	4.3	0	0.0	3
10 - I know how my curriculum is aligned to the benchmarks on the MAP.	9	36.0	5	20.0	9	36.0	2	8.0	0	0.0	1
11 - The district has provided me with specific professional development opportunities in the development and revision of my curriculum.	11	44.0	9	36.0	4	16.0	1	4.0	0	0.0	1

Question	Strongly Agree		Agree		Neutral		Disagree		Strongly Disagree		Number Missing
	N	Pct.	N	Pct.	N	Pct.	N	Pct.	N	Pct.	
12 - The district has provided me with specific professional development activities related to aligning the curriculum to the Show-Me Standards or the MAP.	10	40.0	10	40.0	3	12.0	1	4.0	1	4.0	1
13 - I teach research skills as an integral part of my instruction.	5	20.8	10	41.7	4	16.7	5	20.8	0	0.0	2
14 - Greater emphasis should be placed on cultural diversity awareness in this school.	1	4.0	6	24.0	10	40.0	7	28.0	1	4.0	1
15 - Parents have input into the development of the district's curriculum.	2	7.7	15	57.7	6	23.1	2	7.7	1	3.8	0
16 - Students have input into the development of the district's curriculum.	1	3.8	9	34.6	6	23.1	9	34.6	1	3.8	0
17 - My building uses a number of strategies to motivate students to perform their best on the MAP tests.	9	34.6	14	53.8	3	11.5	0	0.0	0	0.0	0
18 - My school provides parents information about the programs available for children at school.	14	53.8	11	42.3	1	3.8	0	0.0	0	0.0	0
19 - My school provides regular communications to parents about their child's progress.	18	72.0	7	28.0	0	0.0	0	0.0	0	0.0	1
20 - The teachers in my	0	0.0	13	50.0	11	42.3	1	3.8	1	3.8	0

Question	Strongly Agree		Agree		Neutral		Disagree		Strongly Disagree		Number Missing
	N	Pct.	N	Pct.	N	Pct.	N	Pct.	N	Pct.	
building study the achievement levels of subgroups of students (by race/ethnicity, gender, LEP, migrant and/or disability) and based upon this study take actions to improve the performance of any subgroup which lags behind.m											
21 - The school shares with me standardized test results and dropout data disaggregated by disability, gender, and (where appropriate) by race/ethnicity.	11	42.3	11	42.3	3	11.5	0	0.0	1	3.8	0
22 - My school views parents as partners in the educational process.	14	53.8	10	38.5	2	7.7	0	0.0	0	0.0	0
23 - My school provides parents with information about what is expected in its classes.	15	57.7	10	38.5	1	3.8	0	0.0	0	0.0	0
24 - My instructional materials support the curriculum	14	58.3	9	37.5	1	4.2	0	0.0	0	0.0	2
25 - My school provides suggestions to parents on ways to assist at home with their child's learning.	11	42.3	9	34.6	6	23.1	0	0.0	0	0.0	0
26 - I have received the training I need to help students effectively use computers.	6	25.0	8	33.3	9	37.5	1	4.2	0	0.0	2

Question	Strongly Agree		Agree		Neutral		Disagree		Strongly Disagree		Number Missing
	N	Pct.	N	Pct.	N	Pct.	N	Pct.	N	Pct.	
27 - Technology in my school is considered an integral part of the instructional program.	6	23.1	16	61.5	2	7.7	2	7.7	0	0.0	0
28 - I use and integrate computers into my classroom activities.	8	33.3	10	41.7	3	12.5	3	12.5	0	0.0	2
29 - My school has created specific strategies to better involve parents in the education of their child.	3	11.5	11	42.3	11	42.3	1	3.8	0	0.0	0
30 - The board has high expectations for learning.	12	46.2	7	26.9	6	23.1	1	3.8	0	0.0	0
31 - Children are treated fairly in this school.	14	53.8	9	34.6	1	3.8	1	3.8	1	3.8	0
32 - I have received adequate training in using computers and other technology to support the curriculum.	8	32.0	10	40.0	6	24.0	1	4.0	0	0.0	1
33 - The professional development activities I attend are related to districtwide instructional improvement.	12	46.2	10	38.5	3	11.5	1	3.8	0	0.0	0
34 - The community is proud of this school.	16	61.5	10	38.5	0	0.0	0	0.0	0	0.0	0
35 - In our community, people tend to trust each other.	12	46.2	11	42.3	3	11.5	0	0.0	0	0.0	0
36 - Our classes are often interrupted.	0	0.0	6	23.1	1	3.8	16	61.5	3	11.5	0
37 - I think all children	16	61.5	9	34.6	1	3.8	0	0.0	0	0.0	0

Question	Strongly Agree		Agree		Neutral		Disagree		Strongly Disagree		Number Missing
	N	Pct.	N	Pct.	N	Pct.	N	Pct.	N	Pct.	
can learn.											
38 - Teachers here are good teachers.	21	80.8	5	19.2	0	0.0	0	0.0	0	0.0	0
39 - Children are friendly to each other.	12	46.2	14	53.8	0	0.0	0	0.0	0	0.0	0
40 - Parents believe their children can do well in school.	9	34.6	17	65.4	0	0.0	0	0.0	0	0.0	0
41 - Teachers in this school communicate to students and parents on what they are supposed to be learning.	12	46.2	14	53.8	0	0.0	0	0.0	0	0.0	0
42 - Children like attending this school.	15	57.7	9	34.6	2	7.7	0	0.0	0	0.0	0
43 - Parents want to keep their children in this school.	13	50.0	13	50.0	0	0.0	0	0.0	0	0.0	0
44 - This school is a good place to learn.	20	76.9	6	23.1	0	0.0	0	0.0	0	0.0	0
45 - Teachers in this school make learning interesting.	18	69.2	8	30.8	0	0.0	0	0.0	0	0.0	0
46 - If children in this school have a problem, teachers will listen and help.	21	80.8	5	19.2	0	0.0	0	0.0	0	0.0	0
47 - Teachers in this school really care.	21	80.8	4	15.4	0	0.0	1	3.8	0	0.0	0
48 - Teachers in this school treat children with respect.	18	69.2	7	26.9	1	3.8	0	0.0	0	0.0	0
49 - I expect all children	13	50.0	10	38.5	3	11.5	0	0.0	0	0.0	0

Question	Strongly Agree		Agree		Neutral		Disagree		Strongly Disagree		Number Missing
	N	Pct.	N	Pct.	N	Pct.	N	Pct.	N	Pct.	
to achieve at a high level.											
50 - I know what I am expected to do to improve student achievement as outlined in the district's CSIP.	11	42.3	13	50.0	2	7.7	0	0.0	0	0.0	0
51 - I am expected by my administrator to participate in professional development activities.	17	68.0	7	28.0	1	4.0	0	0.0	0	0.0	1
52 - I believe professional development is an integral part of my job.	17	65.4	7	26.9	2	7.7	0	0.0	0	0.0	0
53 - The librarian assists students and staff with individual class projects.	19	73.1	7	26.9	0	0.0	0	0.0	0	0.0	0
54 - Individual counseling services are available to students.	17	65.4	9	34.6	0	0.0	0	0.0	0	0.0	0
55 - Teachers talk about student achievement improvement issues on a regular basis.	14	53.8	9	34.6	3	11.5	0	0.0	0	0.0	0
56 - Our CSIP has been evaluated and updated recently.	18	69.2	5	19.2	3	11.5	0	0.0	0	0.0	0
57 - Overall, my school building is in good condition.	10	38.5	12	46.2	3	11.5	1	3.8	0	0.0	0
58 - The board establishes policies and permits administrators to implement these	9	36.0	14	56.0	2	8.0	0	0.0	0	0.0	1

Question	Strongly Agree		Agree		Neutral		Disagree		Strongly Disagree		Number Missing
	N	Pct.	N	Pct.	N	Pct.	N	Pct.	N	Pct.	
policies on a day to day basis.											
59 - There is good communication between teachers and students.	17	65.4	9	34.6	0	0.0	0	0.0	0	0.0	0
60 - Students are held accountable for doing quality work.	17	65.4	8	30.8	0	0.0	1	3.8	0	0.0	0
61 - Students are taught critical-thinking skills in this school.	10	38.5	15	57.7	1	3.8	0	0.0	0	0.0	0
62 - I use student assessment/performance data to plan my instruction.	7	29.2	13	54.2	3	12.5	1	4.2	0	0.0	2
63 - Students are frequently provided information about their performance.	16	61.5	10	38.5	0	0.0	0	0.0	0	0.0	0
64 - The mission of this school is clearly defined.	18	69.2	8	30.8	0	0.0	0	0.0	0	0.0	0
65 - I have the opportunity to share with the administration what materials are needed in my classroom prior to the adoption of the budget.	14	58.3	5	20.8	4	16.7	0	0.0	1	4.2	2
66 - All staff hold high expectations for student learning.	15	57.7	10	38.5	1	3.8	0	0.0	0	0.0	0
67 - Students understand what conduct is expected of them.	15	57.7	10	38.5	1	3.8	0	0.0	0	0.0	0

Question	Strongly Agree		Agree		Neutral		Disagree		Strongly Disagree		Number Missing
	N	Pct.	N	Pct.	N	Pct.	N	Pct.	N	Pct.	
68 - Rules of conduct for students are consistently enforced.	12	46.2	9	34.6	2	7.7	3	11.5	0	0.0	0
69 - There are open channels of communication among students, staff and administrators.	13	50.0	10	38.5	2	7.7	1	3.8	0	0.0	0
70 - There are avenues for recognizing and rewarding the accomplishments of all students.	15	57.7	9	34.6	2	7.7	0	0.0	0	0.0	0
71 - There are sufficient library media materials to support my program.	12	48.0	11	44.0	2	8.0	0	0.0	0	0.0	1
72 - I have input into the selection of library materials.	18	69.2	7	26.9	1	3.8	0	0.0	0	0.0	0
73 - The community provides enough money to adequately provide quality educational programs to children.	9	34.6	13	50.0	4	15.4	0	0.0	0	0.0	0
74 - Students are safe at this school	20	76.9	6	23.1	0	0.0	0	0.0	0	0.0	0
75 - I feel safe at this school.	21	80.8	5	19.2	0	0.0	0	0.0	0	0.0	0
76 - The library media center materials are current and in good condition.	14	53.8	10	38.5	2	7.7	0	0.0	0	0.0	0
77 - My classes provide an extension of skills and concepts learned in previous grades.	14	58.3	9	37.5	1	4.2	0	0.0	0	0.0	2

Question	Strongly Agree		Agree		Neutral		Disagree		Strongly Disagree		Number Missing
	N	Pct.	N	Pct.	N	Pct.	N	Pct.	N	Pct.	
78 - Parents are frequently provided information about student performance.	19	73.1	7	26.9	0	0.0	0	0.0	0	0.0	0
79 - Students give evidence of being able to apply what they have learned in previous grades.	12	46.2	14	53.8	0	0.0	0	0.0	0	0.0	0
80 - There is a lot of teamwork in our community.	11	42.3	12	46.2	2	7.7	1	3.8	0	0.0	0
81 - Access to the Internet in my building is reliable.	15	57.7	6	23.1	1	3.8	4	15.4	0	0.0	0
82 - Incorporating the Internet into our instructional programs is a high priority in my district.	5	19.2	10	38.5	8	30.8	3	11.5	0	0.0	0
83 - I have the educational technology I need to support my instructional program.	7	28.0	10	40.0	5	20.0	3	12.0	0	0.0	1
84 - I usually look forward to each working day as a teacher.	15	57.7	11	42.3	0	0.0	0	0.0	0	0.0	0
85 - If I had a chance to choose all over again, I would still choose teaching as a career.	14	53.8	7	26.9	4	15.4	0	0.0	1	3.8	0
86 - This school makes children feel they belong.	19	73.1	5	19.2	2	7.7	0	0.0	0	0.0	0
87 - Children in this school have fun learning.	15	57.7	10	38.5	1	3.8	0	0.0	0	0.0	0

Question	Strongly Agree		Agree		Neutral		Disagree		Strongly Disagree		Number Missing
	N	Pct.	N	Pct.	N	Pct.	N	Pct.	N	Pct.	
88 - If I wanted to I could easily arrange for my students to use the Internet at school for a class project.	14	56.0	5	20.0	1	4.0	5	20.0	0	0.0	1
89 - The professional development activities I have attended have changed the way I teach.	10	40.0	12	48.0	1	4.0	2	8.0	0	0.0	1
90 - I use student information from previous classes to plan instruction.	4	16.7	19	79.2	0	0.0	1	4.2	0	0.0	2
91 - Parents are welcome to discuss their child's educational needs with the school.	17	65.4	8	30.8	1	3.8	0	0.0	0	0.0	0
92 - Discipline is handled fairly in this school.	15	57.7	8	30.8	1	3.8	1	3.8	1	3.8	0
93 - Vocational education is an essential part of the district's program of studies.	12	46.2	9	34.6	5	19.2	0	0.0	0	0.0	0

Data Collected in Fall, 2004
Tables Posted November 18, 2004
Mo Dept of Elementary & Secondary Education

VITA

Kyle Collins was born in Maryville, Missouri on November 23, 1967. He has worked in public education since 1997 when he began his career as a teacher and a coach at Northeast Nodaway R-V school district in Ravenwood, Missouri. Mr. Collins began his administrative career as a high school principal and activities director in 2001 at South Nodaway R-IV. In the 2009-2010 school year he was named superintendent of the South Nodaway R-IV school district.

In August of 1998 Kyle married Tricia Duysen and they have two sons, Grant is ten years old and Quin is nine. Kyle and his family have resided in Maryville, Missouri since moving back to the Nodaway County area in 1997 from Omaha.