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The purpose of this study is to identify factors that are necessary for school success. The purpose of identifying these factors is to provide schools a basis to build strategies that prevent students from dropping out of school. This study reviewed the literature to identify factors that contribute to dropping out of schools and factors that contribute to school success.

During the review of the research literature, it was discovered that The Quaglia Institute has completed over 20 years of research on student aspirations. The Quaglia Institute’s research identified 8 Conditions that make a difference in student success. The Quaglia Institute claims that these 8 Conditions need to be in place in order for students to be successful in school.

This study investigated whether students who had dropped out of school perceived the 8 Conditions the same or differently than students who were still enrolled in school. The study was conducted using a multifocus affective inventory and subsequent statistical analysis. The multifocus affective inventory was given to 991 enrolled students in a rural North Carolina high school and to 41 students who had dropped out of that same high school. A chi-square analysis was performed to see if there were statistically significant differences between the observed frequencies and the expected frequencies on each individual question. An independent t -test was performed
on the grouped means to see if there was a statistically significant difference in the means of questions grouped by each dimension of the 8 Conditions.

Conclusions drawn as result of the study were mixed. Research of the literature confirmed the importance of the 8 Conditions in the lives of students. Conclusions drawn from the statistical analysis were varied. "Confidence to Take Action" and "The Role of the Parent" showed statically significant differences in both the chi-square analysis and the t-test. Despite not having statistically significant t-test results on the entire scale, the dimensions of "Spirit of Adventure," "Sense of Accomplishment," and "Belonging" all had a majority of questions with statistically significant chi-square results indicating enrolled students had a higher perception of those dimensions in their lives than did dropouts. While three of the dimensions did not have statistically different t-test or chisquare results: "Curiosity and Creativity," "Fun and Excitement," and "Heroes," their importance was supported by the literature.

# PERCEPTIONS OF PUBLIC SCHOOL: A QUANTITATIVE STUDY COMPARING 

 AND CONTRASTING THE WAY CURRENT STUDENTS AND DROPOUTS VIEW SCHOOL SUCCESS FACTORSby
Phillip Bradley Rice

A Dissertation Submitted to the Faculty of The Graduate School at The University of North Carolina at Greensboro<br>in Partial Fulfillment<br>of the Requirements for the Degree<br>Doctor of Education

Greensboro
2009

Approved by
Ulrich C. Reitzug
Committee Chair
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To my wife Keasha

To my children
Kari, Sarah, and Joshua

## APPROVAL PAGE

This dissertation has been approved by the following committee of the Faculty of The Graduate School at The University of North Carolina at Greensboro.

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## CHAPTER I

## INTRODUCTION

## Background

Public educators are entrusted with assisting students in their education from kindergarten enrollment through graduation. Public education can be the great equalizer for students coming from different backgrounds. This opportunity is only effective if students continue to go to school until they graduate. Even though this leveling of the playing field should be enough to keep all students in school, America is losing students every day.

Each year, students make the decision to become high school dropouts. A dropout is technically defined in North Carolina as a student who leaves school prior to graduation during the school year or during the summer and does not return to school during the first twenty days of the following school year. In the 2006-2007 school year, 23,550 students dropped out of North Carolina Schools (Atkinson, 2008). This was an increase over the 22,180 reported during the 2005-2006 school year.

There are students who are staying in school, graduating, going on to college, and being very successful while others are dropping out of school. How can students from similar backgrounds who enter the same institution end up with very different results? Many complex factors contribute to dropping out of school. Sometimes the reason is as simple as they just do not want to be there.

I have researched factors that contribute to school attrition, lack of success in school being one of them. Dr. Russell J. Quaglia, president and founder of the Quaglia Institute for Student Aspirations, identified eight factors affecting student success in school (Pearson Education, Inc., 2008). He later added an additional dimension, the role of the parent. I will use these dimensions to determine whether dropouts and nondropouts have different perceptions about school.

## Problem Statement

In the 2006-2007 school year, 23,550 North Carolina students decided to forgo their educational opportunity: a decision that could cost each of them, on average, \$388,800 during their working career (Alliance for Excellent Education, 2005). On average, a high school graduate who earns a high school diploma and receives no further education will earn $\$ 7,200$ a year more than a high school dropout. If a student drops out of high school at 16, the legal age in North Carolina, and works until s/he is 70 years old, that is 54 years of work. When a student makes the decision to drop out of school, s/he is actually choosing to lose $\$ 7,200$ a year for the next 54 years, totaling $\$ 388,800$. Figure 1 shows the salaries that people can expect to earn based on their education level.

Figure 2 shows average career earnings by education level for students dropping out of high school (age 16) compared with students who graduate from high school (age 18), earn an associate's degree (age 20), earn a bachelor's degree (age 22), earn a master's degree (age 24), or earn a doctorate degree (age 27), by the time they reach certain retirement ages as determined by social security benefits.


From Alliance for Excellent Education (2005), "Show me the Money: Alliance Analysis Finds That States Could Generate Millions More in Wages by Raising High School Graduation Rates."

Figure 1. Average Salaries by Education Level


From Alliance for Excellent Education (2005), "Show me the Money: Alliance Analysis Finds That States Could Generate Millions More in Wages by Raising High School Graduation Rates."

Figure 2. Average Career Earnings by Education Level

I believe there are differences in the experiences that students have in school that contribute to their decision to drop out of school. During my research, I will try to identify the gaps between the perceptions and experiences of students who stay in public high schools until they graduate and the perceptions and experiences of students who drop out of school. After the gaps are identified, steps can be made to improve the school experience for all students.

## CHAPTER II

## REVIEW OF RELATED RESEARCH

## Introduction

Chapter II contains a review of selected literature about students at risk of dropping out of school. School systems across America are facing more and more challenges every year. Budget cuts, lawsuits, rapidly developing technology, a changing job market, and teachers wanting better working conditions are only the tip of the iceberg. The main challenge is to educate all students effectively. This challenge is growing harder every day.

The research on effectively educating at-risk students is ever growing and extensive. Many articles discuss the problems, and some offer solutions. Most research appears to be qualitative. The lack of quantitative research may be attributed to the lack of assessment tools with established reliability and validity (Bowen, Rose, \& Ware, 2006). There are quantitative studies, but they mainly deal with outcomes. The studies break down the demographics of students who fail or pass the end of course test to identify the profiles of at-risk students and potential dropouts. These studies do not look at the other factors that affect students.

In a capitalistic society, businesses depend on consumers choosing their goods and services over their competitors' goods and services. Many businesses have developed customer service departments to serve the consumers. Wal-Mart employs greeters.

Restaurants employ hosts or hostesses. Many times your receipt will contain a survey so the business will know what you thought of the experience and if you will return in the future.

Non-profit organizations such as churches, community centers, and parks work to draw in voluntary guests through promotions, beautifying the grounds, and working hard at being friendly and inviting. Many times these organizations try to find out how to serve their clientele better by asking them to let them know what they can do better.

In the business of education, schools have become dependent on compulsory attendance laws. The last state to enact compulsory attendance was Mississippi in 1918 (Knight \& Hall, 1951). Since that time, schools have valued many voices and perspectives in the vast research surrounding student success in school. School leaders, principals, and superintendents have been very vocal when defining the problems that accompany a lack of success. University professors have their theories and research to back their opinions about schools. At times, parents have been given the opportunity to offer their perspectives on education.

As people from many different backgrounds seek to address the problem, one voice is noticeably quiet, if listened to at all-the voice of the students. The impact of their decision will reside with them for years to come, yet their perspectives do not seem to be important. Even when quality instruments like the School Success Profile are developed, it is only administered to the staff at the school (Bowen et al., 2006).

This chapter contains four sections. The introduction is focused around several themes-a history and profile of students who are at risk of academic failure. The second
section contains factors that contribute to students dropping out of school. The third section contains reform efforts aimed at reducing the number of dropouts from school. The final section is about the Quaglia Institute, a group who identified eight conditions that they claim is necessary for student success.

In their article entitled, "Mismatch: Historical Perspectives on Schools and Students Who Don’t Fit Them," Deschenes, Cuban, and Tyack (2001) offer a historical perspective of students who do not fit the normal profile of successful students. When students do not fit the normal structure of the social, cultural, or economic backgrounds of most students, they are considered mismatches. Many times, these students are identified as problems and are at risk of academic failure. Deschenes and colleagues found that many people believe that families from certain cultural backgrounds do not prepare their children appropriately for school success. In addition to hindering the start of their children's academic careers, many educators do not believe these parents give support for achievement as they progress through school. Schoolchildren from the culture of poverty or from families with perceived cultural deficits are seemingly judged unteachable.

There is not a single factor or specific profile that depicts a guaranteed dropout. There are multiple examples of students who overcome situations and factors that would derail others, but somehow achieve success throughout their lives. In their book, The Atrisk Student, Ogden and Germinario (1988) make the point that every child is at risk at some point during his/her school career. They also state that each school across the nation has a significant portion of the student body that consistently shows a lack of necessary
social, intellectual, or emotional skills necessary in order to take full advantage of the educational opportunities available to them at any given time. Often these students become detached from school. Many of these students then reject the institution of school and the people in them. These are students at risk of dropping out.

Bill Millikan (2007), the founder of Communities in Schools (an organization that works with schools to bring caring adults into the lives of at risk youth), argues there are five needs that every young person has and deserves. The five needs are a one-on-one relationship with a caring adult, a safe place to learn and grow, a healthy start and a healthy future, a marketable skill to use upon graduation, and a chance to give back to peers and community.

The first basic, a one-on-one relationship with a caring adult, is the cornerstone of the five basics (Millikan, 2007). This person can be anyone - a parent, an uncle, a much older sibling, a teacher, a principal, a coach, a pastor, or any community member interested in the individual. Mentors are the most common and successful examples of a one-on-one caring adult that schools try to place in the lives of at risk youth.

The second basic is having a safe place to learn and grow (Millikan, 2007). Millikan noted the National Coalition for the Homeless estimates that, on any given night, one million three hundred fifty thousand school age children are homeless in the United States of America. Equally important is the parallel need for safe neighborhoods and communities. There is no way to determine how many students have homes they cannot call safe places to live and sleep. Children should also feel safe walking to school
and have a safe place with productive activities after school. Students who do not have this are more at risk of failure.

Children have to be physically, emotionally, and spiritually healthy to complete the third basic need, a healthy start and a healthy future (Millikan, 2007). Children who are involved in drugs, gangs, and other unhealthy behaviors that could cause serious derailment in the health of a child are at risk of losing more than their academic success. Drugs and alcohol can cause the loss of eyesight, asthma, nutritional deficits, and tooth decay. When children deal with these issues, they are less able to focus on their academic success.

The fourth basic need is a marketable skill to use upon graduation from high school (Millikan, 2007). This relates to the second "R" in the new three "R's" in modern education: rigor, relevance, and relationships. Millikan feels like children need a reason to get a diploma; they must see relevance in order to graduate. He cites statistics from the National Summit on America’s Silent Epidemic that dropouts are three times more likely to be unemployed than college graduates. This understanding could cause a desire to finish school. Without this understanding, students are at risk of dropping out of school.

The fifth basic is a chance to give back to peers and community (Millikan, 2007). This basic is not widely documented as a strategy for success nor is it given as an indicator in most profiles of students who are at risk. Although this basic is not obvious, Millikan states that receiving young people's gifts is the key to helping them find their own identity and meaning, therefore creating self worth.

## Factors that Contribute to Dropping out of School

There are a number of factors that contribute to dropping out of school, including teacher expectations, school environment, issues of connectedness with the school, parental influence, and school achievement. Schools also contribute to students dropping out of school. Even though all students who leave are called dropouts, some students are pushed out or pulled out.

## Teacher Expectations

CL, a student in a case study of Korean American high school dropouts (Lew, 2007), was quoted on the relationship between teacher expectations and his decision to drop out of high school:

The thing about New York school, as to why I lost the passion to learn, or whatever, is because first of all, I don't like the teachers, how they treat you . . . I mean a good teacher can make a bad subject worthwhile. And I came here and it's not like that. They all think you are ignorant and they talk to you like you are ignorant and honestly, it just pisses me off. I didn’t want to stay there and personally, I don't like being looked down upon and seen as if I am stupid. And that's very offensive to me so I just left. And it's not just seeing it happen to me, I don't like seeing it happen to others too. (p. 106)

Lew (2007) went on to say none of the Korean-American students that she interviewed had close relationships with their guidance counselors. Lew noted that students did not receive adequate counseling services. In fact, many were advised to leave school early and encouraged to take the general education development (GED) exam instead of finishing their high school classes. Students were given this advice because of the school's perception that the students were not interested in school, the
student's low academic achievement, and the likelihood the student could not graduate on time.

The influence of a counselor or teacher is a major force in the life of a student. Many studies have been conducted to examine the effect of a teacher's attitude on the academic success or failure of a child. After extensive research, Brophy and Good (1974) concluded in their book, Teacher-Student Relationship: Causes and Consequences, when teachers had higher expectations for their students, the students actually produced higher achievement than students for whom the teachers had lower expectations.

According to Smey-Richman (1989) in her book, Teacher Expectations and Low Achieving Students, the degree to which teacher expectations affect the practices in particular classrooms vary with the teacher's personal characteristics and beliefs about his/her teaching and students learning. Smey-Richman noted three major characteristics that affect the expectations teachers have about their students' learning: (1) the teachers’ definition of their own role in their students' learning (the degree to which the teacher is willing to assume the responsibility for their students' learning), (2) rigidity versus flexibility of the teachers' expectations, and (3) the degree to which expectations about individual students are salient and taken into account in the planning and delivery of the instruction. Smey-Richman also noted other potential factors affect a teacher's expectations including the teacher's own intelligence level, cognitive complexity, focus on control, sense of efficacy, casual attribution patterns, cognitive style, tolerance for ambiguity, and various coping and defense mechanisms.

Lehr and Harris (1988) conducted research for their article, At Risk, Low Achieving Students in the Classroom, which supports the belief that teachers do have inappropriate expectations toward students whom they believe to be less capable than other students. Leah and Harris also found that often at-risk students are seated further away from the teacher, given less direct instruction, offered fewer opportunities to learn new material, asked to do less work, called on less often, given less wait time, questioned primarily at the knowledge or comprehension level, not prompted when they do not know the answer to a question, given less praise, rewarded for inappropriate behavior, criticized more frequently, given less feedback, interrupted more often, and given less eye contact and other nonverbal communication. A teacher's perception that a student is going to fail academically can become a self-fulfilling prophecy when the teacher's expectations have the outcomes listed above. Not all of the outcomes must be present. Just the fact the atrisk student does not have access to the full curriculum is enough to retard the learning of the at-risk student.

Purkey and Novack (1984) also noted that the subtle but pervasive presence of inviting and disinviting messages in and around schools have been documented as being related to student success and failure. Teachers tend to be more inviting to students who the teacher considers bright. This is evidenced by winks, nods, and smiles that are given more to students the teacher considers bright. Students whom the teacher considers less efficient learners are more likely to receive less attention, given fewer opportunities to respond, and are sometimes ignored more than their counterparts.

## School Environments

Purkey and Novack (1984) suggested in their book, Inviting School Success: a Self Concept Approach to Teaching and Learning, everyone, and everything, in school should invite students to reach the pinnacle of their human potential. This culture should radiate from every corner of the school building: classrooms, offices, hallways, bathrooms, commons, cafeterias, gymnasiums, buses, playgrounds, media centers, science labs, and classrooms. The culture should also resonate with all adults in spaces listed above: principals, teachers, counselors, social workers, teacher's assistants, bus drivers, cafeteria staff, custodians, and all other school personnel. This culture should permeate both curricular activities as well as extra-curricular activities. Purkey and Novack call this culture "invitational education."

Invitational education is focused on four basic principles: (a) people are able, valuable, responsible, and should be treated as such; (b) teaching should be a cooperative activity; (c) people possess relatively untapped potential in all areas of human development and (d) potential can best be realized by places, policies, and programs that are specifically designed to invite the development of students.

Schools' thoughts and actions of the past 200 years represent a machine mind-set. Peter Senge believes this mind-set directly affects how we see students as products instead of people (Webber, 2007). Peter Senge and colleagues (1999), in their book, Dance of Change: The Challenges to Sustaining Momentum in Learning Organizations, encouraged leaders to stop thinking of themselves as mechanics who work on inorganic
objects and start thinking of themselves as gardeners whose purpose is to grow an organic object.

Joyce Epstein (2001) discussed the three themes: separate responsibilities of families and schools; shared responsibilities of families and school; and sequential responsibilities of families and schools, in her book, School, Family, and Community Partnerships: Preparing Educators and Improving Schools. Epstein shared that even though these responsibilities are profoundly different, they are all necessary to the educational environments and opportunities of our children. She contends there are three spheres in a child's life: family, school, and community. Epstein believes the more these spheres overlap the stronger environment the student will have to achieve success.

Jamie Lew (2007), in her case study on Korean American high school dropouts, learned that studies have shown a majority of minority students from poverty attend poor quality urban schools in economically and socially isolated communities. These schools and their students have been literally cut off from the capital, networks, and institutional resources needed to gain jobs, college admittance, and opportunities for moving into the mainstream economy.

Diane Dorfman and Amy Fisher (2002) scrutinized six schools in Oregon and Montana that are known for strong family involvement in Building Relationships for Student Success. They not only wanted to see what was working, but also investigated how they got to that point. They interviewed parents and school staff for their research. Dorfman and Fisher (2002) found in these schools each family's individual experiences, history, language, and culture were honored. This was achieved in a variety of ways
including asking parents to come to the school to share their life stories to children as meaningful learning opportunities. Other strategies such as back to school barbecues with full staff participation sent the message the staff wanted to get to know the parents, and the parents were not only welcome but their presence was coveted.

Andrea Evans (2007) explored the impact of changing demographics on a school environment in an article titled Changing Faces: Suburban School Response to Change. Evans found three factors that can explain the response to demographic change. The first factor is that a faculty's belief system influences faculty behaviors when faced with demographic change. This can be illustrated by the fact many faculty members believe a student from a minority group who wears sagging pants is automatically in a gang. The second factor is that efforts to construct or maintain a certain identity shape the manner in which schools respond to their demographically changing population. The third factor is that power and politics provide the mechanism through which certain school faculty members influence school decisions and behaviors when faced with a changing population.

Dorothy Lightfoot (2004) examined the way language subtly shapes perception; constraining the way we see reality in her article titled Some Parents Just Don't Care: Decoding the Meanings of Parental Involvement in Urban Schools. Lightfoot addressed three aspects of the problems raised by an unquestioning use of terms like parent involvement. First, she argues parent involvement is multi-faceted and laden with implications of power. She then explores the linkage between particular meanings or metaphors of participation and particular social groups and how they are constrained by
habitual association. Third, she argues the metaphors and other imagery we use to apply terms such as parental involvement to particular groups are used so habitually they become invisible, becoming difficult to question and impossible to change. This usually results in the feeling that schools have things to offer and families have deficits that need to be resolved. This can create a hostile environment that denigrates parents and ranks the culture of the at-risk students as sub-standard.

Stronge and Reed-Victor (2000) suggest looking for ways schools can be opened as semi-community centers, offering time for homeless families to be in a safe and nurturing place. Extended hours for the media center and gymnasium are ways schools can literally open the doors of their facilities to give relief to families facing homelessness. Stronge and Reed-Victor also suggest schools look to be inviting places by offering school supplies, forgoing fees, and removing barriers many take for granted. They advocate that perhaps the most effective strategy for aiding homeless students is to offer opportunities for leadership. This could be instrumental in the self-worth of homeless children and be instrumental in continuing their education.

Barr and Parrett (2007) looked at profiles of students at risk in, The Kids Left Behind: Catching Up the Underachieving Children of Poverty - A Synthesis of Research on What Works in High-Performing, High Poverty Schools. Poverty is the greatest barrier to academic success. It often results in homes with few books and little or no technology other than a television. Children in poverty usually suffer from poor health care and little educational stimulation. Barr and Parrett cite research that children in poverty come to school with a limited vocabulary and with few reading readiness skills. In addition to
basic poverty, they found four other factors to identify students as at risk: being culturally diverse and living in poverty, having limited English proficiency, having parents with less than a high school education, and living with a single parent

With forty-two percent of homeless students not attending school, Stronge and Reed-Victor (2000) argue that homeless students are the greatest collection of students at risk of dropping out of school. Many times these students are transient and do not carry proper paperwork. Recent laws are now in place to prevent the discrimination these students previously faced when they were denied admittance to schools. Many homeless students fit the profile of a student at risk.

## Issues of Connectedness with the School

Teresa Nesman, Brigita Barobs-Gahr, and Lydia Medrano (2001) conducted a study of Latino students, their families, and the school personnel who served them. The researchers' comparison of demographics of the students who remained in school and the students who dropped out of school showed marked differences in absences, discipline referrals, suspensions, and grade-point-averages. They noted the students who dropped out of school had two to three times the number of absences, referrals, and suspensions of those who graduated. The researchers found most of the students who graduated were not participating in the free/reduced lunch program. They noted over half of the students who had dropped out of school had been participants of the free/reduced lunch program. The participants described major contributors to Latino student success as personal motivation to succeed, supportive parents, and being interested and involved in school activities. Other participants described supportive teachers and school staff, staying out of trouble,
having academic skills, knowing how to get help, and having a clean and safe environment at school as factors affecting student success.

Participants who were classified as successful students noted the challenges that exist for Latino students and students who move from school to school. They reported they were able to adapt to different schools and were able to re-negotiate relationships (Nesman et al., 2001). Even with these skills, they noted the need for additional support to help them navigate differences in schooling and to help them catch up on missed work.

The participants placed an emphasis on the need for strong relationships with staff members (Nesman et al., 2001). Several participants who had dropped out noted no one tried to talk them out of dropping out of school. Other participants noted the need for teachers to include Latinos in class discussions instead of allowing them to stay silent and disengaged, while other participants noted the schools needed more people who would listen to them.

Sandra Winn Tutwiler (2007) defined academic disengagement as students feeling disconnected from academics and appearing to have little value for academics and its related outcomes on their lives in her article titled How Schools Fail African American Boys. This academic disengagement is noted as the primary reason for academic failures of African American boys. Many times African American students avoid engaging in the curriculum and instruction in the classroom based on the perception the activities are more fitting for white students than for themselves. This academic disengagement, as well as other factors, results in African American boys receiving lower grades in school,
having higher dropout rates, lower standardized tests scores, and lower college participation rates than boys from other ethnic groups in the United States of America. In 2003, The Center for Child Development and Social Policy at Yale University commissioned a report titled Portraits of Four Schools: Meeting the Needs of Immigrant Students and Their Families. This report examined how schools and communities address the needs of growing populations of immigrant students. The four schools in this report were ahead of the curve in trying to be family friendly. These schools already contained family resource centers, childcare, parenting programs, home visits, and evening activities for the community. They still experienced barriers to parental participation in the educational process. To overcome these barriers, educators started doing innovative things such as meeting parents at their jobs (Zigler, 2003). Although these schools have done a lot more than most, they still report barriers they have yet to overcome.

Wendy Glasgow Winters (1994) explored the alienation of minority parents through "meaningless," "normlessness," and "powerlessness" in a working paper titled Working with African American Mothers and Urban Schools: the Power of Participation. After exploring the issues, Winters determined no one person or thing could solve the problems. A true collaborative effort is required when the shared accountability is effectively shifted from the school alone to the newly empowered parents. After the study, Winters concluded when alienation was reduced, participation increased.

In 2002, the Kentucky State Department of Education performed a quantitative study titled Student Achievement Gaps in High Performing Schools. Cowley and Meehan (2002) looked at high performing schools in the state that had a marked statistical
difference in educating minority students. One of the variables investigated was the connection between the school, the family, and the community. Students, parents, and staff were surveyed on several different criteria: learning culture, school/family/community connections, shared leadership, shared goals for learning, purposeful student assessment, and effective teaching. The criterion with the lowest mean was school/family/community connections. Schools with higher means in this criterion had a lower achievement gap than schools with a higher mean. Cowley and Meehan determined the relationship between school/family/community connections and achievement gap was inversely proportional.

It is not unusual for students and their parent to identify with classrooms where a positive feeling exists (Ogden \& Germinario, 1988). These feelings are usually the result of a classroom that is warm and supportive. This type of classroom promotes an atmosphere conducive to risk taking without penalty. This allows students to become active participants in their own education. Students are more likely to work better and have higher achievement in this type of environment where it is assumed they will succeed in the developed tasks. A relationship exists between the achievement gains of students who have below average and average ability levels, and the number of times the teacher recognizes the correct responses they give in their classrooms. Teachers must plan for situations for these students to get correct answers and earn the praise and positive reinforcement associated with high achievement.

Ron Clark (2003) learned ways to connect his students’ lives with the real world and with himself as a human. He shared his secrets in The Essential 55: an Award

Winning Educator's Rules for Discovering the Successful Student in Every Child. Clark realized many students did not come to school with middle class values and this deficit could make his students at risk. He connected with the children teaching them 55 essential rules that would prepare his students for future success by preparing them to navigate society's unwritten rules. The 55 rules he taught are considered by many to be the hidden curriculum at schools that many at-risk students fail before they fail the regular curriculum.

Jamie Lew (2007) also noted providing students with the instructional and social support such as counselors or access to teachers is pivotal for academic success. However, many at-risk students in her study were not privy to such relationships. The experience of the students showed there was an overwhelming lack of mutual trust and respect between teachers and the students.

Mary Henry (1996) explored ways parents connect with school in her book titled Parent-School Collaboration: Feminist Organizational Structures and School Leadership. Henry examined collaboration between schools and the families through a feminist lens. She discovered schools could not determine everything about a school day, school structure, ways of communicating, etc. on their own without marginalizing and disenfranchising the public that they are suppose to serve. The feminist perspective is more women should be in decision-making roles so schools will become more caring, as the women would listen to the voices of others. This will make schools places where there is a connection to students who are at risk and connection to parents who have a direct impact on the lives of their children.

## Parental Influence

Parents have an undeniable influence in the lives of their children. Gary Chapman and Ross Campbell looked at five ways children need love and acceptance. Chapman and Campbell (1997) called these avenues of love the five love languages. Chapman and Campbell believe every child has one of five ways they connect to a loving parent. They list them as physical touch, words of affection, quality time, gifts, and acts of service. Although written as a book on parenting, The Five Love Languages of Children has a direct implication on schools. In today's society, raising an emotionally healthy child is becoming increasingly difficult. Chapman and Campbell contend children have a burning desire to be loved that cannot be quenched. They believe that if a parent does not speak the love language of their children, the children will find someone who does speak their language. This can manifest itself at school with children acting out to receive quality time with a teacher. They could also make mistakes on an assignment to get a teacher to become an editor, thus giving acts of service to the child. Of course, there are positive ramifications at school when teachers use positive touch and words of affirmation that makes the student strive that much more. Ideally, children will have many people in their lives who speak their love language. The importance of the parent giving their own child the love and support they need cannot be transferred since the first five years of the child's life are spent at home.

The students in Nesman, Barobs-Gahr, and Medrano’s (2001) study, who had dropped out reported many factors that led to their decision to drop out of school. Participants reported a lack of support from parents as one of those factors.

Annette Lareau (2003) examined the role of twelve families that came from different backgrounds of race, class, and family life in Unequal Childhoods: Class, Race, and Family Life. Lareau looked at families of third graders from poverty and from wealth, and families who were Caucasian and were African American. She placed researchers in the homes as quiet researchers to look at the families and their daily interactions. Lareau made sure to give a fair account of the pitfalls of concerted cultivation and a life of informal play. What could not be ignored was the impact of middle class teaching and the resulting behaviors of power and voice often absent from at-risk students.

Barri Tinkler (2002) wrote a literature review entitled A Review of the Literature on Hispanic/Latino Parent Involvement in k-12 Education. In this review, she found that parental involvement is important for student achievement. Recent studies have shown parent involvement in minority families is decreasing. Much of the research that offers solutions to the educational disparity of minority students focuses on parental involvement. Teachers and parents disagree about the involvement level of minority parents. Teachers judge the level of involvement of parents by the amount of time parents spend at the schools, in conferences, volunteering, etc. Many minorities, especially Latino parents, view the concern they have about the education their children are receiving as parental involvement. The discrepancy between the perceptions of teachers and parents lies more in the definition of parental involvement because different people and cultures define it differently.

Tinkler (2002) also noted many times teachers miss out on opportunities to get parents involved because they have not received proper training on ways to incorporate parents in schools. Even though this does not come across as an overt dismissal of the parent, it is a lost opportunity to validate the parent and fails to capitalize on the potential boost in self-esteem of the student. This lack of training also is harmful when Latino families push to become involved in the schools. Many times teachers view this push as too aggressive and feel their power is in jeopardy.

Many schools can overcome these barriers by working to become warm, caring, inviting, and receptive to parents (Tinkler, 2002). Open communication is important to developing this type of climate within the total school environment, including the staff, students, faculty, and parents of a school. This type of communication might not be available at the school. When this cannot be achieved at school, home visits become crucial. Although this might seem intrusive in American culture, it has proven to be received well in the Latino culture.

Lew (2007) noted many of the parents of the Korean American students who dropped out of school were not active in their children's educational pursuits. There were cases where the school's attempt to contact the parents were met with limited support from the parents. Many times the students would intercept the mail or phone calls from the school. Even when the parents did receive the phone calls or letters, the parents did not speak or read English. Many parents also worked long hours, preventing them from visiting with counselors during school hours.

In their manuscript, Culture, Difference and Power in School-Family Relations: Considering Responses to Demographic Change, Dr. Camille Wilson Cooper and Romy Allen present two elementary schools in North Carolina that have experienced significant demographic changes. Cooper and Allen (n.d.) discovered many of the minority parents who were new to the schools were unaware of how they could best contribute to their child's academic success. Cooper and Allen also discovered schools disregard families’ cultural and educational resources. They also discovered the traditional parent involvement structures prevent families from becoming true educational partners.

Gonzalez and colleagues (1995) studied how schools can help close the cultural divide that Cooper and Romy reported. In their article titled Funds of Knowledge for Teaching in Latino Households, Gonzalez and colleagues found home visits with the purpose of reaching the family could be an effective way to reconnect the parents with their student's academic achievement. These visits are not centered on what the school can do for the family; it is a reconnaissance trip to discover what the family has to offer the school. This gives the family self-worth and students pride in their family and culture.

Pedro Noguera (2001) also explored ways in which parental involvement at local school sites could generate the social capital necessary to improve inner-city schools and the communities they serve in his book titled Social Capital and Poor Communities. Noguera's recommendations went farther than the traditional calls for parents to be interested in the education of their children and to be supportive of the teachers. Noguera made the case for schools to build the bridge to the parents. Noguera called for schools to
be more responsive and supportive of the children, families, and communities they serve by consciously developing partnerships based on mutual accountability and respect.

Concha Delgado-Gaitan (2001) wrote about a group of Hispanic parents who banded together for the good of their children in The Power of Community: Mobilizing for Family and Schooling. Comit'e de Padres Latinos/Committee of Latin Parents (COPLA) was organized to help new immigrant families navigate the new world of public education in America. This group not only helped parents to understand the educational system, it became a voice of the Latino community that had previously been ignored.

The parents of homeless students care for the education of their children but many times are consumed with the fight to survive (Stronge \& Reed-Victor, 2000). The search for shelter, food, clothing, and a job take on more importance than parent-teacher conferences and PTO meetings.

Stronge and Reed-Victor (2000) stress the need for schools to secure parental involvement for the sake of children faced with homelessness. Stronge and Reed-Victor suggest the schools look for opportunities to meet the needs of families and their children as a way of bridging the divide between schools and their lives. Stronge and Reed-Victor suggest schools should help coordinate services between different agencies, freeing up time so parents will be able to be more involved in their children's schooling.

## School Achievement

In the study conducted by Jamie Lew (2007), it was noted many of the Korean American students she interviewed had a record of retention due to failing grades,
absences, and cutting classes. The students in Lew's case study explained once they began cutting class and "hanging out" with friends, they could not make up for their failing grades, which in turn discouraged them from attending classes. When they did go back to classes, they were either so far behind they could not catch up or faced going to classes that were characterized by inefficient learning environments.

The students in Lew's study consistently mentioned the lack of academic rigor, low expectations, and limited academic and social support from their teachers and school counselors. The students were also under the impression a general education development (GED) certificates and a high school diplomas were equivalent. The students in Lew's case study were led to believe a GED would be a cure-all that would erase their past delinquent school records and give them a second chance.

David E. Tanner (2003) took a statistical view of the correlation between academic achievement and dropping out of school. He wanted to see if past academic achievement could be used as a statistically reliable predictor. At the conclusion of his research, he published his study as a research report in 2003 Academic Achievement as a Dropout Predictor.

Tanner analyzed the descriptive statistics for the student's SAT scores by grade (Tanner, Johnson, \& Newbold, 2003). Tanner also used a $t$-test for statistical differences to analyze the differences of the scores of the students who dropped out of school, and the scores of students who graduated from school. Tanner collected the following data as shown in Table 1:

Table 1. Achievement Test Results in Descriptive Statistics and T-Test Results

| Grade | $N$ | Test | Group | Mean | Std. Dev. | $t$ | Sig. | $w^{2}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 50 | Math | Dropped | 48.200 | 28.755 | 1.863 | 0.650 |  |
|  |  |  | Graduated | 59.260 | 30.571 |  |  |  |
| 7 | 50 | Reading | Dropped | 47.120 | 28.603 | 1.606 | . 111 | . 05 |
|  |  |  | Graduated | 56.120 | 27.410 |  |  |  |
|  | 50 | Math | Dropped | 42.900 | 29.899 | 2.604 | . 011 |  |
| 9 |  |  | Graduated | 58.320 | 29.315 |  |  |  |
|  | 50 | Reading | Dropped | 42.760 | 31.439 | 2.682 | . 009 | . 06 |
|  |  |  | Graduated | 59.180 | 29.757 |  |  |  |
| 11 | 50 | Math | Dropped | 49.140 | 16.462 | 4.123 | . 000 | . 14 |
|  |  |  | Graduated | 62.280 | 15.389 |  |  |  |
|  | 50 | Reading | Dropped | 47.900 | 17.461 | 2.809 | . 006 | . 06 |
|  |  |  | Graduated | 57.420 | 16.417 |  |  |  |

From "Academic Achievement as a Dropout Predictor," by D.E. Tanner, D. B. Johnson, \& B. L.Newbold, B. L., 2003, Research Report, California State University, Fresno.

Tanner agreed there might be several social or psychological variables contributing to the students' decision to drop out of school in addition to poor academic performance. Tanner marginalized these factors because the school systems could have little or no impact on these variables; therefore, for the purpose of this study, Tanner only analyzed the students' reading and math scores as potential dropout predictors. Of the six sets of scores analyzed, only the $11^{\text {th }}$ grade math scores had the statistical reliability to be used as a predictor of students staying in school.

Homeless students may be transient and have educational gaps due to changing schools (Stronge \& Reed-Victor, 2000). Attendance for this group of children is often inconsistent at best. Many times, the intellectual ability and the academic performance are incongruent due to their housing issues.

Barr and Parrett (2007) also agree at-risk students suffer when they get behind academically. They believe schools add to this problem with ineffective teaching. They also believe retention and tracking practices, including pullout programs, also hurt children. An over-reliance on medication to modify behavior was also found to have a negative impact on students. They also noted smaller schools would benefit at-risk students. Multiple suspensions and expulsions (a student who is permanently dismissed from a school or school district - usually the result of a severe violation of the student code of conduct or General Statute) hurt at-risk students as it disrupts the educational process. These factors combine to form educational neglect and a pedagogy of poverty (which includes teacher controlled discussions and decision-making; lecture, drill and practice; worksheets; cultural aberration; and low quality of education). To combat this, Barr and Parrett suggest eight strategies and practices that have proven to be effective in working with at-risk students:

1. ensure effective district and school leadership;
2. engage parents, communities, and schools to work as partners;
3. understand and hold high expectations for poor and culturally diverse students;
4. target low performing students and schools, particularly in reading;
5. align, monitor, and manage the curriculum;
6. create a culture of assessment and data literacy;
7. build and sustain instructional capacity;
8. reorganize time, space, and transitions.

## "Pull Out" Versus "Push Out" Versus "Dropout"

Stearns and Glennie (2006) suggest there are three trends at play when students make the decision to drop out of school: pull out, push out, and drop out. "Pull-out theories assume students make a cost-benefit analysis of their economic interest to remain in or leave school." Out-of-school employment or family responsibilities are usually at the heart of most pull out decisions. Push out factors include school policies established that affects the student's decision to drop out of school or not. These factors may include discipline and academic policies or conflicts with teachers or administrators. Drop out factors include relocation and attendance issues.

Table 2. Dropout Reason Disaggregated by Grade and Reason

|  | Push-Out Reasons |  | Pull-Out Reasons |  | Dropout Reasons |  |
| :---: | ---: | ---: | ---: | ---: | ---: | ---: |
| Grade | Academic | Disciplinary | Employment | Family | Moving | Attendance |
| $9^{\text {th }}$ | $6.54 \%$ | $10.66 \%$ | $10.66 \%$ | $4.21 \%$ | $6.95 \%$ | $59.96 \%$ |
| $10^{\text {th }}$ | 7.11 | 7.52 | 13.71 | 4.88 | 6.09 | 59.10 |
| $11^{\text {th }}$ | 8 | 4.92 | 15.97 | 5.59 | 5.62 | 58.55 |
| $12^{\text {th }}$ | 10.44 | 4.3 | 14.10 | 5.57 | 5.69 | 58.51 |

From "North Carolina data on dropouts, 1998-1999 [Data file]", by North Carolina Department of Public Instruction, 2000, North Carolina Research Data Center.

Barr and Parrett (2007) discovered an extreme example of poor school environments: schools encouraging struggling students to drop out of school. Many
students are encouraged to transfer or to enroll in general education development programs, charter schools, or other programs in an attempt to remove students from the assessment pool.

Michelle Fine (1991) also addressed many push out factors in her book, Framing Dropouts: Notes on the Politics of Urban School Reform. Discharge was the term used by the New York City Board of Education to describe what a school does to a student who was in violation of the attendance or age policies. An office aid in the school even stated, "I don't know why they call them dropouts, when we make them go." During one month, 149 students were discharged from the one high school where Fine did her research. Fine found administrators encouraged many students to leave school and did not encourage other students to stay when students asked about dropping out.

Carole Gallagher (2001), in one of the few studies that appear to value the voice of the students who have dropped out of school, conducted interviews with four students who had recently made the decision to drop out of high school. She asked the participants to describe their school histories, highlighting special grades, events, or teachers, and asked them to identify factors that led to their decision to drop out of school. Gallagher also asked the participants to talk about their present situations and future plans. She also reviewed the official account of each subject's school history and scrutinized each subject's assignment of special services, attendance, schools attended, grades, high school transcripts (courses and credits), promotion and retentions, and standardized test scores (including Graduation Qualifying Exams), to corroborate the participants’ statements as well as to offer any additional information not given by the participants.

Gallagher's limited sample presented a wide-ranging profile of a high school dropout, though commonalities were present. Notably, the students all reported their unique needs were not addressed by the schools, school officials, or by teachers. The participants did not feel valued and few had developed relationships of trust with teachers or other adults at school. When pressed further, the students did have positive experiences with teachers in earlier grades. In fact, many spoke highly of their elementary experiences, making note of caring relationships and teachers who believed in them, took ownership of them, and refused to let them fall behind. In contrast, they felt as though they were not welcome at their high school. They felt as though they were pushed out. One subject noted "No one tried to get me to stay, no one cared if I left or not."

Linda McSpadden McNeil, Eileen Coppola, and Judy Radigan of Rice University and Julian Vasquez Heilig from the University of Texas-Austin (2008) conducted a study documented in the Education Policy Analysis Archives titled Avoidable Losses: HighStakes Accountability and the Dropout Crisis. This study scrutinized the effect the Texas accountability system, which was the forerunner of No Child Left Behind, had on the dropout rate. The researchers used both qualitative and quantitative data in the study. The quantitative part of the study made use of a longitudinal data set of 271,000 students to examine the effects of the first-generation Texas-style accountability system in a large urban district from 1995-2002 (McNeil et al., 2008). The qualitative portion of the study was achieved through interviews, observations, and focus groups. School policies were also researched for the study (McNeil et al., 2008). Attendance policies were scrutinized
as well as promotion/retention policies. The researchers also investigated the policy that allowed schools to apply for a waiver from traditional promotion standards.

The researchers noted that statewide the "Texas miracle" of higher test scores was reported after the institution of the Texas accountability system (McNeil et al., 2008). Brazos City School District also reaped the benefits of the miracle. Brazos City School District reported 26\% of their schools were rated as low performing in 1996-1997. By 1997-1998, no schools were reported as low performing. During a four-year span from 1997 to 2001, the proportion of schools rated in the top two categories (recognized and exemplary) increased from 8\% to 43\%.

The "Texas miracle" was wonderful on the surface. The problem was educators and policy makers became master strategists. Because students were tested in the $10^{\text {th }}$ grade, school administrators began retaining the struggling students in the ninth grade. Students remained retained until the administrators were sure the students would pass the accountability tests when they reached the $10^{\text {th }}$ grade (McNeil et al., 2008). Some students reported being freshmen three or four times. The results of this strategic retention was evident in all racial groups but was profound in minorities as Table 3 illustrates.

The problem was the retained students eventually dropped out of school. The school district reported less than 33\% of the entire student body graduated from high school within five years. The school district also reported $80 \%$ of students with language difficulties dropped out of school.

Table 3. Enrollment Numbers Disaggregated by Grade Level \& Ethnicity by Year

| Ethnicity | $9^{\text {th }}$ grade | $10^{\text {th }}$ grade | $11^{\text {th }}$ grade | $12^{\text {th }}$ grade |
| :--- | ---: | ---: | ---: | ---: |
| 1996 African American/Latino | 12,361 | 6,229 | 5,212 | 5,363 |
| 1997 African American/Latino | 16,076 | 7,212 | 5,997 | 5,757 |
| 1998 African American/Latino | 14,265 | 6,877 | 5,517 | 5,344 |
| 1996 White/Asian | 1,959 | 1,303 | 1,095 | 1,084 |
| 1997 White/Asian | 2,216 | 1,340 | 1,196 | 1,118 |
| 1998 White/Asian | 2,442 | 1,640 | 1,384 | 1,301 |

From "Avoidable Losses: High-Stakes Accountability and the Dropout Crisis," by L.M. McNeil, E. Coppola, J. Radigan, and J. Vasquez Heilig, 2008, Education Policy Archives, 100.

Table 4. Graduation Eligibility Disaggregated by Race

|  | Graduation eligible <br> within 5 years | District Reports <br> Graduated within 5 <br> Years |
| :--- | :---: | :---: |
| Student Characteristics | $30.1 \%$ | $32.7 \%$ |
| Overall | $44.9 \%$ | $43.3 \%$ |
| White | $26.1 \%$ | $24.8 \%$ |
| Latino | $29.3 \%$ | $39.4 \%$ |
| African American | $53.1 \%$ | $49.4 \%$ |
| Asian American | $26.3 \%$ | $28.3 \%$ |
| Economically Disadvantaged | $14.1 \%$ | $20 \%$ |
| Limited English Proficient | $7.3 \%$ | $19.3 \%$ |
| Did not pass the 8 ${ }^{\text {th }}$ grade reading TAAS | $9.7 \%$ | $22.3 \%$ |
| Did not pass the 8 $8^{\text {th }}$ grade math TAAS |  |  |

From "Avoidable Losses: High-Stakes Accountability and the Dropout Crisis," by L.M. McNeil, E. Coppola, J. Radigan, and J. Vasquez Heilig, 2008, Education Policy Archives, 100.

The students reported school became less personal during the stage of accountability (McNeil et al., 2008). Students reported relationships with teachers disappeared. The curriculum became less relevant and more test oriented. Reading and
math began being taught in all classes including physical education. This, along with new attendance policies that fined students as much as $\$ 500$ per day (after the fourth unexcused absence), helped the students decide to drop out of school. The researchers concluded the forerunner of No Child Left Behind, in fact, did leave many behind, and in many cases, accelerated the exit from school.

## Reform Efforts Intended to Decrease Dropping Out of School

"Education reform is a plan, program, or movement, which attempts to bring about a systematic change in educational theory or practice across a community or society" (K12 Academics, n.d.). People have been teaching children since there were children to teach. Reform efforts probably began after the first failed lesson. It could be argued every effort to reform instruction has been put into place to keep students from dropping out of learning.

## Classical Reform Movements

Scrutiny of education is not a new pastime. Around 380 B.C., Plato wrote in The Republic, ". . . compulsory learning never sticks in the mind" (Plato, 1992). This indicates we have been losing children for centuries. The scrutiny of education led leaders to look at the whole child. During the 1700 ’s, Immanuel Kant stated, "For by education we must understand nurture (the tending and feeding of the child), discipline (Zucht), and teaching, together with culture" (Kant, 1960). This type of examination led to reform movements in American education.

## Progressive Education

Due to the leadership of John Dewey, progressive education officially arrived in the mid 1940's, evident by the fact it was no longer referred to as progressive education but as "good education" (Ravitch, 1983). While there is not a clear-cut definition of progressive education, the difference from traditional education is evident. Progressive education rejected the traditional beliefs of the purposes of schools. Modern schooling emphasized active learning rather than passive learning; cooperative planning of classroom activities by teachers and pupils; and collaboration among pupils on group projects instead of competition for grades. Recognition of individual differences in students' abilities and interests, justifying the curriculum by its utility to the student or by the way it met identifiable needs and interests of students were traits of modern schooling. The goal of effective living rather than acquisition of knowledge; the value of relating the program of the school to the life of the community around it; the merging of traditional subject into core curricula or functional problem areas related to family life, community problems, or student interests also were major shifts from traditional schooling. In modern schooling, the use of books, facts, or traditional learning were only used when needed as part of the students’ activities and experiences. All of these efforts were made to keep students engaged in their learning and in school.

## From Progressive to No Child Left Behind

Progressive education lost supporters in the 1950's. Many debated the merits of traditional versus progressive education until 1957 when Sputnik orbited the earth. The post-Sputnik educational focus shifted back to math and science (Ravitch, 1983). During
the period of 1972-1982, the dropout rate ranged from a high of 6.7 in 1974, 1978, and 1979 to a low of 5.5 in 1982 (Kaufman, Naomi, \& Chapman, 2004). A Nation at Risk was published in 1983 leading Americans to the conclusion that American schools were failing our kids. This report further strengthened the perception that traditional curriculum and methods were needed. A Nation at Risk might have raised the consciousness of America as the dropout rate decreased from 6.2 in the 11 years before its publication to an average of 4.8 in the 18 years after its publication, from 1983 to 2000 (Kaufman et al., 2004).

In 2001, George W. Bush proposed the No Child Left Behind Act. Part of the reason for the implementation of No Child Left Behind, the controversial Federal Law in place today, is attributed to the staggering dropout rates in America (McNeil et al., 2008). Jack Jennings (2006) noted 10 big effects of the No Child Left Behind Act on public schools. He states that student achievement on state testing is rising as schools are spending more time on reading and math, and schools are paying more attention to the alignment of curriculum with instruction. Low-performing schools are undergoing makeovers, and more teachers are meeting academic qualifications. Students are being tested more, and the achievement gap is getting needed attention. The percentage of schools that "need improvement" is not growing, but the federal government has increased its role in education. State governments and school districts have more work to do but have not received additional funding. Joan Oleck (2008) would like to make an increase in the dropout rate the eleventh effect, but the numbers do not support her claim that No Child Left Behind has led to more dropouts. In fact, Jennings could have written
about a reduced dropout rate as the eleventh effect. From 2002 through 2006, the average dropout rate fell to an average of 3.98\%. Part of No Child Left Behind is that states must report the dropout rate every year. The states must also report academic achievement by subgroups; shining a light on where reform efforts are needed. The belief was this type of scrutiny would lead educational leaders to reverse the negative trends. If one looks at the dropout indicator, No Child Left Behind has been successful.

## Factors that Contribute to School Success

The Quaglia Institute has been asking students questions about their perceptions of school for over 20 years. After listening to students’ voices, the Institute identified eight factors attributing to school success (2007). Russell Quaglia and Casey Cobb (1996) feel so strongly about the importance of these eight conditions that they believe school administrators should look at how their school's climate affects their students’ aspirations.

The Quaglia Institute believes in order for students to be successful in school there are eight conditions that enable them to reach their goals (My Voice® National High School Report Academic Year 2006-2007, 2007). Quaglia's research has been published in many professional journals such as Educational Administration Quarterly, Journal of Instructional Psychology, American School Board Journal, Adolescence, and the Journal of Psychological and Educational Measurement (Pearson Education, Inc., 2008).

Eva Kampits (1996) spoke of the importance of student aspirations and their role in the growth and development of students of all ages. Kampits also stated both student
and teacher aspirations are increasingly viewed as important identifiable components of quality schools, that when neglected, can lead to apathetic academic performance and dropping out of school.

Herbert Walberg and Rebecca Greenberg (1996) stated the survey instrument the Quaglia institute uses to learn about student aspirations is reliable and can be used to give a rich understanding of students. They stated Quaglia's research of student aspirations could lay a foundation for educators to help solve problems facing the students of today. Theodore Sizer (Sizer, 1996) (1996) specified strategies schools need to employ after researching Quaglia's work. Sizer noted schools should seek to hire staffs that have internalized the eight conditions and are able to help foster them in their students. Sizer thought working on the eight conditions is important enough that schools should arrange their schedules to allow students to pursue their aspirations and dreams.

In 2008, the Quaglia Institute published a report covering the data collected from 2006-2008. Over 400,000 students completed the My Voice® survey. Over 500 schools from 32 states participated in the research (Quaglia Institute, 2008). The report was organized around the eight conditions.

## Belonging

Belonging means a student is a valued member of a community, while still maintaining his or her uniqueness (Quaglia Institute, 2008). It is defined as a relationship between two or more persons characterized by a sense of connection and support.

Belonging is a necessary condition for the students’ well-being, social engagement, and competence. The condition of Belonging increases intrinsic motivation as it fosters self-
confidence and investment in the community. Sara Quay and Russell Quaglia (2004) gave a simple indicator to allow teachers to assess their students' belonging. It is to ask, "What percentage of my students do I know by name?"

Sandra Winn Tutwiler (2007) addressed a lack of belonging when she spoke of how African American students’ lack of engagement in the school led students to drop out of school. Carole J. Gallagher (2001) referenced belonging when she reported the students in her study had not developed relationships of trust with teachers or other adults at school. She even quoted one student as saying, "No one tried to get me to stay, no one cared if I left or not."

## Curiosity and Creativity

The condition of Curiosity and Creativity is characterized by the student's inquisitiveness, eagerness, a strong desire to learn new and interesting things, and a longing to satisfy the mind with new discoveries (Quaglia Institute, 2008). Curiosity will trigger students to ask "Why?," while creativity gives them the initiative to ask "Why Not?" Curiosity is natural in young children, but the intensity of Curiosity and Creativity tends to diminish over time due to the habituating effects of the environment. To sustain student motivation, schools must pay careful attention to creating learning environments that promote questioning and creative exploration. Quay and Quaglia’s (2004) simple indicator to allow teachers to assess their students' creativity and curiosity is to ask, "How do I make time and space in my class for creativity and curiosity?"

Gallagher (2001) concluded her study with the challenge to educators to co-create a "public space" where all voices are heard, in order to be able to understand what is
really best for each individual student and to collaborate in envisioning a more inclusive school community. Annette Lareau (2003) noted many families are different in the way they allow their children to be curious. Lareau noted children from middle class homes are encouraged to think of questions and to ask them of adults and authority figures. Michelle Fine (1991) viewed the opposite effect on students in her study. She saw firsthand how students were silenced and expected to conform. Fine noted the inevitable frustration that resulted led to students leaving public education.

## Fun and Excitement

The condition of Fun and Excitement is characterized by the student being inspired to learn (Quaglia Institute, 2008). The student is actively engaged and emotionally involved in his schoolwork. Those who exhibit Fun and Excitement are selfconfident, curious, and prepared; they are willing to meet the challenges of the day. Students need to be offered new opportunities, as well as meaningful challenges, that are connected with their individual interests. The school environment is the key to helping students enjoy school. Quay and Quaglia's (2004) simple indicator to allow a teacher to assess their students' fun and excitement is to ask, "When was the last time my class was filled with laughter?"

Stronge and Reed-Victor (2000) addressed making schools fun and exciting for homeless students by suggesting schools look for ways to be open as a semi-community center offering a place for families to be in a safe and nurturing place.

## Heroes

Heroes are the everyday people. They can be teachers, friends, family, or anyone in students' lives who inspire them to excel and to make positive changes in attitudes and lifestyles (Quaglia Institute, 2008). They are people with whom students can connect, who have a positive influence on them, and who listen to and value their ideas. Heroes allow the student to build trust in and belief in self. An educator, who builds relationships with students through support, guidance, and encouragement, enabling their students to become more confident in their academic, personal, and social growth, is a hero. Quay and Quaglia’s (2004) simple indicator to allow teachers to assess if their students' have proper heroes is to ask, "What do I model for my students?"

Gallagher (2001) concluded her study by saying relationships with caring adults is essential. Jamie Lew (2007) addressed heroes when she noted that providing students with social support such as counselors or access to teachers is pivotal for academic success but that many at-risk students in her study were not privy to such relationships.

## Leadership and Responsibility

The condition of Leadership and Responsibility means students are allowed to express their ideas and are willing to accept consequences for their actions (Quaglia Institute, 2008). This condition cultivates accountability for the classroom environment and school community. Schools that promote this condition both teach and expect their students to be good decision makers. These schools provide legitimate decision-making opportunities, seek student input, and expect students to be accountable for their actions and words. These students are trusted to make the right decisions and are recognized for
doing so. Quay and Quaglia’s (2004) simple indicator to allow teachers to assess their students' leadership and responsibility is to ask, "Are leadership and responsibility regularly shared with students in my classroom?"

Fine (1991) noted students were not encouraged to be leaders at the school in her study. In fact, an administrator noted critical talk was once deemed safe but democracy was rapidly being shut down. This practice kept many students from developing their leadership abilities and excluded them from participating in a school democracy. This exclusion led to the students looking for other places to find personal value.

## Sense of Accomplishment

The condition of Sense of Accomplishment recognizes the effort, perseverance, and citizenship along with academic achievement as signs of student success (Quaglia Institute, 2008). Traditionally, educators have used a narrow view of accomplishment as it refers to innate ability, grades, or who is "best in the class." This condition, however, views success in terms of personal growth and effort, not just class rank and test scores. Schools strong in this condition celebrate their students' accomplishments in visible ways. The Quaglia Institute believes taking time to recognize and support students’ efforts will result in students who are motivated to persevere through difficult tasks and create a healthy learning environment through hard work and dedication. Quay and Quaglia's (2004) simple indicator to allow teachers to assess their student's sense of accomplishment is to ask, "Do I talk with students about growth and learning as often as I talk about grades?"

The students in Gallagher's (2001) study thought they could accomplish more outside of school than by staying in school. The students all valued a high school diploma. Two have since earned their GED and the other two were going to pursue a GED the following summer, but their immediate negative feelings about school were more compelling than the distant, long-range goal of a high school graduation. The students agreed closing the door of public education would open other opportunities for them.

## Spirit of Adventure

Spirit of Adventure is characterized by the students’ ability to take on positive, healthy challenges at school and home, with family and friends (Quaglia Institute, 2008). Students experience the Spirit of Adventure when tackling something new without the fear of failure or success. Schools that promote healthy decision-making and healthy risk taking produce students who become more confident and resilient. Students with the Spirit of Adventure will see life as full of opportunities worth exploring for their own sake. Quay and Quaglia's (2004) simple indicator to allow teachers to assess their student's spirit of adventure is to ask, "How often do I see students taking risks in my classroom?"

Ogden and Germinario (1988) addressed the spirit of adventure when they talked about the importance of a classroom that is warm and supportive. This type of classroom promotes an atmosphere that is conducive to risk taking without penalty. Ogden and Germinario recommended teachers plan for situations for students to get correct answers
and earn the praise and positive reinforcement that is associated with taking risk and the resulting high achievement.

## Confidence to Take Action

Confidence to Take Action is the degree to which students believe in themselves (Quaglia Institute, 2008). It is the condition that encourages them to dream about their future while being motivated to set goals in the present. All of the other conditions must be established and supported for students to attain this level of aspiration. Confidence to Take Action is characterized by a positive and healthy outlook on life and by looking for intrinsic rather than extrinsic rewards. Schools can help a student build their Confidence to Take Action by providing support, celebrating diversity, and encouraging independent thinking. Quay and Quaglia’s (2004) simple indicator to allow teachers to assess their students' confidence to take action is to ask, "Do students regularly express their views in my classroom and how do I respond when they do?"

Nesman et al. (2001) noted the benefits of students being confident to take action. The Latino students in their study who were successful reported they were able to adapt to different schools and were able to renegotiate relationships on their own without assistance from others.

The Quaglia Institute, through years of research, has identified 8 conditions that attribute to school success. Their research is quantified through students' voice through the medium of a multi-focus affective inventory. As stated before, over 400,000 students from over 500 schools from 32 states completed the My Voice® survey between 2006 and 2008 (Quaglia Institute, 2008). These students were given the opportunity to talk about
their schools and give their schools some feedback. These students were still enrolled in school. They were asking the questions of students who were still satisfied enough with their school experience to remain enrolled, but what about the ones who did not have the same experience? What about the unsatisfied customers who chose to quit school? Who is going to listen to their voice?

## CHAPTER III

## METHODOLOGY

## Research Questions

The following research question guided this study: What are the differences in the perceptions and experiences of students who drop out of public high schools and students who stay in public high schools until they graduate? This research question will be investigated using the eight conditions necessary for school success that were identified by the Quaglia Institute. The 8 Conditions are:

- Belonging
- Heroes
- Sense of accomplishment
- Fun and excitement
- Curiosity and creativity
- Spirit of adventure
- Leadership and responsibility
- Confidence to take action

The proposed data analysis lends to answering the following questions, hypothesis, and null hypothesis:

1. Do students who drop out of school feel a different level of belonging to their former school than students who are still enrolled in school feel toward their current school?
$\mathrm{H}_{1}: \mu_{\mathrm{E}} \neq \mu_{\mathrm{D}}$
Students who are still enrolled in school feel more belonging to their school than the students who have dropped out of school felt while at their former school.
$H_{0}: \mu_{E}=\mu_{D}$
2. Do students who drop out of school feel they have a different amount of heroes than students who are still enrolled in school?
$\mathrm{H}_{1}: \mu_{\mathrm{E}} \neq \mu_{\mathrm{D}}$
Students who are still enrolled in school feel they have more heroes than students who have dropped out of school had while at their former school.
$H_{0}: \mu_{E}=\mu_{D}$
3. Do students who drop out of school feel differently about their sense of accomplishment than students who are still enrolled in school?
$\mathrm{H}_{1}: \mu_{\mathrm{E}} \neq \mu_{\mathrm{D}}$
Students who are still enrolled in school feel more sense of accomplishment than the students who have dropped out of school.
$H_{0}: \mu_{E}=\mu_{D}$
4. Do students who drop out of school feel different levels of fun and excitement than students who are still enrolled in school?
$\mathrm{H}_{1}: \mu_{\mathrm{E}} \neq \mu_{\mathrm{D}}$
Students who are still enrolled in school feel more fun and excitement at their school than the students who have dropped out of school felt about their former school.
$H_{0}: \mu_{E}=\mu_{D}$
5. Do students who drop out of school feel differently about their level of curiosity and creativity than students who are still enrolled in school?
$\mathrm{H}_{1}: \mu_{\mathrm{E}} \neq \mu_{\mathrm{D}}$
Students who are still enrolled in school feel more curiosity and creativity than students who have dropped out of school.
$H_{0}: \mu_{E}=\mu_{D}$
6. Do students who drop out of school feel differently about their spirit of adventure than students who are still enrolled in school?
$\mathrm{H}_{1}: \mu_{\mathrm{E}} \neq \mu_{\mathrm{D}}$
Students who are still enrolled in school do not feel the same levels of their spirit of adventure than students who have dropped out of school.
$H_{0}: \mu_{E}=\mu_{D}$
Students who are still enrolled in school have a greater spirit of adventure than students who have dropped out of school feel.
7. Do students who drop out of school feel differently about their leadership and responsibility than students who are still enrolled in school?
$\mathrm{H}_{1}: \mu_{\mathrm{E}} \neq \mu_{\mathrm{D}}$
Students who are still enrolled in school feel more leadership and responsibility than students who have dropped out of school.
$\mathrm{H}_{0}: \mu_{\mathrm{E}}=\mu_{\mathrm{D}}$
8. Do students who drop out of school feel differently about their confidence to take action than students who are still enrolled in school?
$\mathrm{H}_{1}: \mu_{\mathrm{E}} \neq \mu_{\mathrm{D}}$

Students who are still enrolled in school feel more confidence to take action than students who have dropped out of school feel.
$\mathrm{H}_{0}: \mu_{\mathrm{E}}=\mu_{\mathrm{D}}$

## Instrument Reliability

The central office staff of a rural North Carolina school district developed the survey instrument during the 2007-2008 school year. The questions were used with the school system's written consent. The North Carolina school system developed the questions after reading research from the Quaglia Institute about the eight factors attributing to school success, the result of over twenty years of asking students questions about their perceptions of school (2007). The questions were developed to measure the conditions in schools that attribute to students reaching their aspirations, allowing them to be successful, engaged, and participating in school. The Central North Carolina School District did not use the Quaglia Institute's instrument because they felt it was too long, and there were additional questions they needed to ask their students to comply with state regulations and local initiatives.

Jonathan Plucker (1996) examined the construct validity evidence of the Student Aspirations Survey, the forerunner of the My Voice® Survey, in an article published in the Journal of Research in Rural Education. At the time of this study, the University of Maine was using an instrument they called the Student Aspirations Survey. The instrument Plucker examined contained two aspiration scales, two self-description scales, and eight conditions scales.

The survey was distributed to the student bodies at four secondary schools in rural Maine (Plucker, 1996). Two sets of factor analysis allowed the evidence of construct validity to be collected. In order to interpret the student score, the items were averaged within scales. This negated the impact of having differing number of items when making inter-scale comparisons. The descriptive statistics are noted below for each condition.

## Table 5. Descriptive Statistics for the 8 Conditions

| Condition | $n$ | Mean | Std. Dev. | Kurtosis | Skewness |
| :--- | ---: | ---: | ---: | ---: | ---: |
|  |  |  |  |  |  |
| Achievement (Sense of Accomplishment) | 1007 | 2.09 | 0.47 | 0.70 | 0.31 |
| Belonging | 978 | 2.26 | 0.48 | 1.03 | 0.56 |
| Curiosity (and Creativity) | 986 | 2.12 | 0.45 | 1.78 | 0.42 |
| Empowerment (Leadership and Responsibility) | 1065 | 2.39 | 0.56 | 0.41 | 0.47 |
| Excitement (Fun and) | 992 | 2.45 | 0.57 | -0.18 | 0.28 |
| Mentoring (Heroes) | 990 | 2.26 | 0.51 | 0.64 | 0.41 |
| Risk Taking (Spirit of Adventure) | 947 | 2.23 | 0.45 | 1.04 | 0.39 |
| Self-Confidence (Confidence to Take Action) | 945 | 2.14 | 0.48 | 0.54 | 0.33 |

From "Construct Validity Evidence for the Student Aspirations Survey" by J. A. Plucker, 1996, Journal of Research in Rural Education, 12 p. 168.

Cronbach's alpha statistic of internal consistency was run in order to test the groupings of items by each condition and how well they hold together. All conditions had an alpha ranging from 0.64 to 0.75 . The average alpha for all conditions was 0.72 . This evidence suggested the instrument was minimally reliable for use with groups.

Twelve years later, and a name change from the Student Aspirations Survey to the My Voice® Survey, Matt Bundick and Matt Andrews, researchers at Stanford University, conducted an analysis of the My Voice© Survey (Quaglia Institute, 2008). Cronbach’s alpha of internal consistency was calculated in order to test the groupings of items by each condition and how well they hold together. All conditions had an alpha ranging
from 0.68 to 0.83 . This was an increase over Plucker's 1996 analysis. This increase was credited to a modification in some of the questions during the 12 years between the studies. Table 6 shows the results of Bundick \& Andrews analysis.

## Table 6. Internal Reliability for the 8 Conditions

| Condition | Alpha |
| :--- | ---: |
| Belonging | 0.69 |
| Heroes | 0.77 |
| Sense of Accomplishment | 0.71 |
| Fun and Excitement | 0.83 |
| Curiosity and Creativity | 0.77 |
| Spirit of Adventure | 0.68 |
| Leadership and Responsibility | 0.67 |
| Confidence to Take Action | 0.83 |

From "My Voice® Survey Background and Reliability Report" by the Quaglia Institute, 2008.

Table 7 contains an indication of how Cronbach's alpha would be expected to change if a particular item were removed. Items in italics were changed slightly from the original My Voice© Survey.

Table 7. Internal Reliability for the My Voice© Survey

| Number | Condition | Question | Alpha if <br> removed |
| :--- | :--- | :--- | ---: |
| 5 | Belonging | I feel accepted for who I am at school. | 0.581 |
| 6 | Belonging | I have difficulty fitting in at school. | 0.632 |
| 7 | Belonging | School is a welcoming and friendly place. | 0.584 |
| 8 | Belonging | I am proud of my school. | 0.586 |
| 9 | Belonging | I have been bullied at school. | 0.690 |
| 16 | Confidence to Take Action | My teacher expects me to do my best. | 0.817 |
| 19 | Confidence to Take Action | School is preparing me well for my future. | 0.812 |
| 14 | Curiosity \& Creativity | At school, I am encouraged to be creative. | 0.736 |


| 18 | Curiosity \& Creativity | My classes help me understand what is <br> happening in my everyday life. | 0.744 |
| :--- | :--- | :--- | ---: |
| 11 | Fun \& Excitement | I enjoy being at school. | 0.794 |
| 13 | Fun \& Excitement | School is boring. <br> 24 | Fun \& Excitement |

From "My Voice® Survey Background and Reliability Report" by the Quaglia Institute, 2008.

Descriptive statistics were also provided. The researchers used means, standard deviations, skewness, and kurtosis to describe the data. Table 8 contains the descriptive
statistics collected by Bundick and Andrews (Quaglia Institute, 2008). Items in italics were changed slightly from the original My Voice © Survey. Items in bold were not on the My Voice® Survey but were added by the Central North Carolina School district.

Table 8. Descriptive Statistics for the 8 Conditions

| Number | Question | Mean | Std. <br> Dev. | Skewness | Kurtosis |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 5 | I feel accepted for who I am at school. | 3.976 | 0.992 | -1.104 | 4.082 |
| 6 | I have difficulty fitting in at school. | 3.952 | 1.113 | -1.022 | 3.325 |
| 7 | School is a welcoming and friendly place. | 3.544 | 0.972 | -0.789 | 3.349 |
| 8 | I am proud of my school. | 3.332 | 1.189 | -0.433 | 2.391 |
| 9 | I have been bullied at school. | 3.045 | 1.254 | -0.117 | 2.047 |
| 10 | I know the goals my school is working on. | 3.071 | 1.206 | -0.079 | 2.135 |
| 11 | I enjoy being at school. | 3.239 | 1.163 | -0.467 | 2.363 |
| 12 | I have never been recognized for something positive at school. | 3.537 | 1.203 | -0.535 | 2.359 |
| 13 | School is boring. | 2.648 | 1.249 | 0.213 | 2.003 |
| 14 | At school, I am encouraged to be creative. | 3.509 | 1.033 | -0.593 | 2.902 |
| 15 | Teachers provide me with challenging assignments. |  |  |  |  |
| 16 | My teacher expects me to do my best. | 3.974 | 0.9027 | -1.007 | 4.300 |
| 17 | I use technology in my classes to help me learn. |  |  |  |  |
| 18 | My classes help me understand what is happening in my everyday life. | 3.080 | 1.092 | -0.211 | 2.351 |
| 19 | School is preparing me well for my future. | 3.759 | 1.108 | -0.769 | 2.974 |
| 20 | Teachers care about me as an individual. | 3.360 | 1.041 | -0.460 | 2.867 |
| 21 | Teachers care if I am absent from school. | 3.258 | 1.103 | -0.320 | 2.427 |
| 22 | If I have a problem, I have a teacher with whom I can talk. | 3.288 | 1.261 | -0.320 | 2.082 |
| 23 | I have a teacher who is a positive role model for me. | 3.755 | 1.118 | -0.778 | 3.001 |
| 24 | Teachers enjoy working with students. | 3.549 | 0.964 | -0.581 | 3.269 |
| 25 | Teachers make school an exciting place to learn. | 2.914 | 1.113 | -0.103 | 2.327 |
| 26 | Teachers respect students. | 3.439 | 1.125 | -0.521 | 2.605 |
| 27 | Students respect teachers. | 3.082 | 1.026 | -0.237 | 2.340 |
| 28 | Students respect each other. | 2.861 | 1.122 | -0.060 | 2.247 |
| 29 | Safety is important at my school. |  |  |  |  |
| 30 | I push myself to do better academically. | 3.791 | 1.009 | -0.761 | 3.180 |
| 31 | I put forth my best effort at school. | 3.791 | 1.009 | -0.761 | 3.180 |


| I am excited to tell my friends when I get | 3.577 | 1.149 | -0.494 | 2.438 |
| :--- | :--- | :--- | :--- | ---: |
| good grades. |  |  |  |  |
| I am afraid my friends will not like me if I <br> do well in school. | 4.470 | 0.882 | -2.023 | 7.158 |
| My parents care about my education. | 4.625 | 0.723 | -2.522 | 10.661 |
| My parents think going to college is <br> important. | 4.561 | 0.811 | -2.186 | 8.052 |
| My parents feel comfortable talking to my <br> teachers. | 3.784 | 1.014 | -0.632 | 3.050 |

From "My Voice® Survey Background and Reliability Report" by the Quaglia Institute, 2008.

The multi-focus affective inventory I used contained 36 questions. Thirty-two questions were for the purpose of the research and four questions were demographic questions. The surveys asked the respondents if they agree with various statements on a five-point Likert scale: Strongly Agree, Agree, Undecided, Disagree, Strongly Disagree. The questions I used on the survey are listed in Appendix A.

## Local Implementation of Survey

The Quaglia Institute believes that in order for students to be successful in school the conditions that enable them to reach their goals must be in place (My Voice National High School Report Academic Year 2006-2007, 2007). The Quaglia institute identified these conditions as the eight Conditions that Make a Difference ${ }^{\mathrm{TM}}$. The Quaglia Institute developed the My Voice® Student Aspirations Survey to measure students’ perceptions of the 8 conditions. The My Voice© Student Aspirations Survey has students respond to 57 statements about the 8 Conditions, as well as demographic questions. Students respond using a 5-point Likert scale ranging from "strongly agree" to "strongly disagree." The Quaglia Institute also wanted to know the students’ perception of the role of their parents in their education. Quaglia's research has been published in many professional
journals (Pearson Education, Inc., 2008). For more information see the following:
(Quaglia, 1989), (Quaglia, McCaul, \& Davis, 1991), (Quaglia \& Brown, 1994), and (Quaglia \& Perry, 1995).

The senior staff of a Central North Carolina School District developed its own 5point Likert scale survey after reading the Quaglia Institute for student aspirations research. The survey I used for this study is the student survey a Central North Carolina School District developed for its students. Table 9 shows how the questions related to each of the eight conditions and the role of their parents.

## Table 9. Relationship between the Survey Questions and the Conditions Being Surveyed

| Number | Condition | Question |
| :--- | :--- | :--- |
|  |  |  |
| 5 | Belonging | I feel accepted for who I am at school. |
| 6 | Belonging | I have difficulty fitting in at school. |
| 7 | Belonging | School is a welcoming and friendly place. |
| 8 | Belonging | I am proud of my school. |
| 9 | Belonging | I have been bullied at school. |
| 16 | Confidence to Take Action | My teacher expects me to do my best. |
| 19 | Confidence to Take Action | School is preparing me well for my future. |
| 14 | Curiosity \& Creativity | At school, I am encouraged to be creative. |
| 18 | Curiosity \& Creativity | My classes help me understand what is |
| 11 | Fun \& Excitement | happening in my everyday life. |
| 13 | Fun \& Excitement | I enjoy being at school. |
| 24 | Fun \& Excitement | School is boring. |
| 25 | Fun \& Excitement | Teachers enjoy working with students |
| 20 | Heroes | Teachers make school an exciting place to |
| 21 | Heroes | learn. |
| 22 | Heroes | Teachers care about me as an individual. |
|  |  | Teachers care if I am absent from school. |
| 23 | Heroes | If I have a problem, I have a teacher with |
| 26 | Heroes | whom I can talk. |
| 27 | Heroes | I have a teacher who is a positive role model |
| 28 | Heroes | for me. |
| 10 | Leadership \& Responsibility | Teachers respect students. |
|  |  | Students respect teachers. |
|  | Students respect each other. |  |
| I know the goals my school is working on. |  |  |


| 12 | Sense of Accomplishment | I have never been recognized for something <br> positive at school. |
| :--- | :--- | :--- |
| 31 | Sense of Accomplishment | I put forth my best effort at school. <br> I push myself to do better academically. |
| 30 | Spirit of Adventure | I am excited to tell my friends when I get good <br> Spirit of Adventure |
| 32 | Spirit of Adventure | I am afraid my friends will not like me if I do <br> well in school. |
| 34 | The Role of Parents <br> The pole of Parents | My parents care about my education. <br> My parents feel comfortable talking to my |
| 35 | The Role of Parents | Meachers. <br> The |
| 15 | Additional Question added by the <br> School System | Teachers provide me with challenging <br> assignments. |
| 17 | Additional Question added by the <br> School System | I use technology in my classes to help me <br> learn. |
| 29 | Additional Question added by the <br> School System | Safety is important at my school. |

## Description of Key Concepts and Variables

- Academic Achievement - The student’s performance as measured by grades earned in a class and scores earned on end of course tests.
- Belonging - the student's feeling he, or she is part of the group, while knowing he, or she is important as an individual.
- Confidence to take action - The student sets goals and takes steps needed to reach them.
- Climate - The total school environment including the staff, students, faculty, and parents of a school.
- Curiosity and Creativity - The student is able to ask "why?" and "why not?" when questions arise about the world around him or her.
- Dropout - A student who leaves school prior to graduation, during the school year or during the summer, and do not return to school during the first twenty days of the following school year.
- Expulsion - A student who is permanently dismissed from a school or school district. This is usually the result of a severe violation of the student code of conduct or General Statute.
- Fun and Excitement - The student enjoys what he or she is doing, whether at work, school, or at play.
- Heroes - Having someone who believes in the student and is there for the student when the student needs them.
- Leadership and Responsibility - The student is able to make his or her own decisions and is able to accept responsibility for his or her choices.
- Sense of Accomplishment - The student is recognized for many different types of success, including hard work and for being a good person.
- Spirit of Adventure - The student is excited to try new things, even if he or she is not sure they will be good at them.


## Research Setting

I chose to conduct my research study in a small school district in central North Carolina that contains one high school. The high school I chose to use as my sample had between 53 and 93 dropouts every year between 2001 and 2008. During that span, this high school averaged 71 dropouts a year. The high school's average membership during the same span was 1,202 .

## Research Participants

Nine-hundred and ninety-one students completed the survey during the spring of the 2008 - 2009 school year. Students who are enrolled at that time rated themselves, their families, and the schools they attend in the areas of (a) belonging, (b) heroes, (c) sense of accomplishment, (d) fun and excitement, (e) curiosity and creativity, (f) spirit of adventure, (g) leadership and responsibility, and (h) confidence to take action. I then attempted to survey the 89 students who dropped out of the high school during the 2008 2009 school year in these same eight areas.

## Data Collection

Students who were still enrolled in "Central North Carolina High School" were surveyed on a computer by using ZARCA, an interactive website that offers the ability to capture and analyze timely and accurate insights (About ZARCA, 2000). Surveys were administered in the spring of the 2008-2009 school year.

I obtained the names, addresses, and phone numbers of the students who dropped out of the Central North Carolina High School from the Central North Carolina School District Office. I personally visited each last known address of each of the students who dropped out of the "Central North Carolina High School." After obtaining the appropriate consent/assent forms, I asked the former students to complete the same survey the enrolled students completed by hand and asked them to submit the surveys through the United States mail using a provided addressed and stamped envelope.

## Data Analysis

I used descriptive statistics to analyze the statistics from the two sets of data, dropouts, and current students. I reported and compared the mean and standard deviations for each group for each question.

The questions on multi-focus inventories have a range of answers that are discrete. The chi-square statistic is designed for use when the outcomes are counts that fall into categories. The chi-square statistic determines whether observed counts in cells are different from expected counts.

I used a chi-square test of independence to compare the answers of the students who were enrolled in school with the answers of the students who have dropped out of school. The chi-square statistic was then compared to the appropriate p-value. Since the chi-square statistic assumes a discrete distribution rather than a normal distribution, the results will be statistically valid. The calculations for the chi-square test were performed using Excel (see example in appendix G). I also grouped the questions by each of the 8 Conditions. I performed an independent t-test on the grouped means.

## Limitations

Several limitations were discovered during the design and process of the project. While using the multi-focus inventory that was already created by the school district had some advantages, it did not follow common guidelines (see James Popham, (2008) for example guidelines). There were three areas where the multi-focus inventory I used may have been flawed.

According to Popham (2008), each multi-focus inventory should only check five or six affective dimensions while the one I used was designed to measure nine predetermined dimensions as well as other questions that were included to meet other requirements. Popham also suggests using the same number of positively and negatively stated questions. The multi-focus inventory I used had 31 affective domain questions and only one was negatively stated. The last design problem was the affective domains should have had an equal number of questions. The instrument I used varied from seven questions (heroes) to one question (leadership and responsibility).

One final design challenge was that after the school system gave me the multifocus inventory that was to be used; they changed the instrument and did not notify me of the change. The school system deleted two questions. One of the deleted questions was the one question related to leadership and responsibility. That domain was not included in any comparative statistical analysis. The other question that was deleted was in the belonging domain. Because there were four other questions dealing with belonging, that domain was still included for statistical analysis.

The first challenge I faced during the process of the project was due to inaccurate records. Fourteen of the addresses the students gave to "Central North Carolina High School" when they withdrew did not contain the information I needed to find their residence. Ten of the fourteen were in apartment complexes, but they did not give the apartment number. Four of the addresses could not be found.

Another barrier to finding all of the former students was student mobility.
Twenty-five of the students I visited had moved away. Nine of the addresses had either
eviction notices or notices from the power company the power would be turned off unless the bill was paid. One young girl's mother stated the girl had moved back to Mexico. Three of the young girls' parents told me the girls had moved to other cities with their boyfriends. One of the young boy's father told me his son was addicted to drugs and had moved away. He also stated he did not know where he lived and did not care where he was. I looked in the windows of the other 11 residences, and all were vacant.

I was unable to get anyone to answer the door at one former student's house. I heard people talking, and I could hear and see a television playing. I visited this house on two different occasions. Both times, I could hear people in the house, but neither time was I successful at getting them to answer the door.

After visiting several of the homes multiple times, I eventually spoke with 51 of the 89 students who dropped out of "Central North Carolina High School." I talked with each of the students about my dissertation. I told them the research I was conducting would also be shared with the "Central North Carolina High School" in an attempt to improve the school. If the students were minors, I also spoke with their parent(s) or guardian(s) to obtain parental consent. All 51 former students agreed to complete the survey. I explained to the students that the multi-focus inventory was the same instrument given to the students who were still enrolled in school. This would mean the questions were asked as if they were still enrolled. I asked the students to answer the questions as if they were completing the survey on the last day they were enrolled in school. I left the survey with them in a self-addressed stamped envelope. Forty-one students returned the survey for an 80 percent return rate. While I am pleased with this return rate, I am a little
disappointed in only receiving 41 surveys from the 91 dropouts, a return rate of 45 percent of all dropouts.

The next limitation in the process was not getting 100 percent participation from the students who I was able to contact. Even though all of the former students agreed in person to complete the survey, 10 did not. Several factors could have led to these 10 students lack of participation.

In an attempt to make the surveys anonymous and in an effort to increase participation, I left the survey and a self-addressed stamped envelope with the former students. I was hoping this level of "security" would make the former students more comfortable completing the instrument. This might have enabled decreased participation, as I could not control what they did after I left.

Seeing me as a member of the institution that failed them might have been another limitation, which might have prevented the 10 students who agreed to submit the multifocus inventory but did not. Even though I told the students I was conducting the research as a graduate student, they still might have seen me as their former assistant principal or central office administrator. At some point during the past seven years, I could have suspended them, denied them a transfer, denied them transportation, etc. This could give the student ample reason not to participate in the survey.

The largest threat to the interpretation of the results of the project is external validity. As stated before, I would like the study to be meaningful, but in reality, my project included one group of former students, in a twenty-one square mile area, who made the decision to drop out of school during a 12-month period. To increase the
external validity, the study would have needed to take place in random places across the nation, covering all demographics, over an extended period.

I did not attempt to generalize the results of the dissertation are relevant to all schools for all time. The results of this study are relevant to a small school system in rural North Carolina in 2009. I will attempt to survey dropouts from the Central North Carolina High School after this project is done by trying to make the school survey part of the paperwork that is completed when a student drops out of school. That way, even though the study is over, the administration can continue to monitor perceptual gaps in students enrolled and the students who chose to drop out of school.

## Benefits and Risks of the Study

Researchers are responsible for the protection of their participants. The Belmont report gives practical guidelines for protecting human participants by identifying the basic ethical principles that should underlie the conduct of biomedical and behavioral research involving human participants and to develop guidelines, which should be followed to assure such research is conducted in accordance with those principles (Research, 1979).

Researchers should respect the subject by remembering participants should be treated as autonomous agents and the subject's diminished autonomy are entitled to protection (Research, 1979). The researcher should also provide beneficence to the subject by insuring they do not harm the subject, maximize possible benefits, and minimize possible harms. Researchers should also insure justice through the equal distribution of burdens and benefits according to the following formula: to each subject
an equal share, to each subject according to individual need, to each subject according to individual effort, to each subject according to societal contribution, and to each subject according to merit.

Practically, participants in this study were protected by the following procedures. All information obtained in this study was strictly confidential unless disclosure is required by law. After receiving consent/assent, the subject was given a survey and an unmarked envelope. The subject was asked to complete the survey anonymously. After the surveys were received, they were stored. Survey results were then transferred into an electronic database without any way of identifying the participants. The consent forms, database, and surveys are being kept for three years after completion of the project. The surveys and consent forms are being stored in a locked filing cabinet. Electronic data is being stored on a hard drive with password protection. At the end of three years, the electronic data will be deleted and the consent forms and all other paper from the project will be shredded.

Consent procedures for former students who are still minors:
The parents or guardians of former students under 18 years old were visited in person. They were given a copy the UNCG/IRB approved consent form. I explained to them all aspects of the research project and requested permission to speak to the former student. After the parent/guardian signed the UNCG/IRB approved consent form, providing permission to speak with the former student, I provided an assent form to the former student. I explained all aspects of the research project to the former student. Only after the former student signed the UNCG/IRB approved assent form, providing permission to proceed, did I provide the survey and self-addressed stamped envelope.

Procedures for former students who are adults:
I provided the UNCG/IRB approved consent form to the former student. I explained all aspects of the research project to the former student. Only after the former student signed the UNCG/IRB approved consent form, providing permission to proceed, did I provide the survey and self-addressed stamped envelope.

## Timeline

The study took place over 90 school days and 180 calendar days. The study began in the spring of 2009 and continued until August 23. The average time to complete the survey should have been 20 minutes.

## Significance of the Study

## Professional Significance

A lot of research has been completed on the factors that lead to students dropping out of high school. Theories come from teachers, school administrators, college professors, and professional researchers. One voice that has been noticeably absent is the voice of the actual dropouts. This study listened to the voices of the people who dropped out of school through quantitative analysis. Because it listened to the voice of the clientele it failed, the study could serve as a catalyst for school improvement, which I hope will make school more appealing to students and lead to fewer dropouts.

## Personal Significance

I have been involved in public education for 32 of the 37 years I have been alive. These 32 years can be divided into four distinct stages. These stages all contributed to this study.

The first stage includes my 14 years as a student who watched fellow classmates disappear from the desks next to me. I always wondered what happened and why they disappeared. Those who disappeared were not close friends, so the comfort level was not there to ask them why they dropped out of school.

The second stage includes the seven years I spent as a public school teacher. During my teaching career, I developed relationships that have endured to this day. I was involved in their lives beyond the classroom forming a mutually beneficial relationship from the sharing of cultures and experiences. During this stage, I taught students who were too young to drop out of school legally.

The third stage includes my five years as a middle school administrator, one year as a behavior management specialist, and four years as an assistant principal. Developing relationships with students was a priceless benefit of my professional growth as an administrator.

I am currently in the fourth stage of public education. I am the director of support services in the same school system in which I was a middle school assistant principal. I am completing my second year in this role. One of the many aspects of my job is dropout prevention specialist, which includes writing a letter to each dropout informing them of the opportunity to continue their educational opportunities at the community college.

It is during this fourth stage I have become emotionally disturbed about dropouts. I am writing letters to former students, students whom I know. With every letter I write, I see the faces of students who I laughed with in the hallways, and the faces of their parents who brought them to school asking me to take care of their "babies." I see the faces of
students who were extremely bright and the students who were challenged by school. I see the faces of students who were discipline problems and the faces of students were model students. I see faces from affluence and faces from poverty. I see faces of color and faces like mine. I am haunted by these faces of people who have made the decision to quit school. I see faces of people whose decision could lead them into a life of poverty. I see faces of people who have made a decision that could cripple their lives. I have seen their faces, now I have heard their voices.

## Conclusion

I have dedicated the last 18 years of my life to educating young people. During that time, I have seen thousands of students make the decision to leave school before they graduated. I needed to know why they made this decision, and more importantly, are there steps public educators can take to prevent these decisions in the future?

To try to attain a snapshot of this information, I surveyed students who were still enrolled in a high school and students who dropped out of that same high school during the same year. I compared the results of their surveys to see if discrepancies existed. I will use the discrepancies that surface to try to affect policy and practice in the district in which I work to help prevent students from making the $\$ 388,800$ mistake.

## CHAPTER IV

## DATA ANALYSIS

In August 2008, 1,301 students enrolled at "Central North Carolina High School." During the month of April, "Central North Carolina High School" asked each of the students to take a survey about their perceptions of school. Nine hundred ninety-one students completed the survey. The school calls this survey the "customer satisfaction survey."

During the school year, many students enrolled, some transferred, and 91 dropped out. I obtained the names and addresses of the 91 students and attempted to visit with each of them and ask them to complete the multi-focus inventory. Fifty-one of the former students agreed to participate, and 41 returned the multi-focus inventory.

The multi-focus inventory I gave to the students who dropped out of school was slightly different from the one given to the enrolled students. Two questions, questions 9 and 10, were deleted from the instrument that was given to the high school students. I was not aware of this deletion until after I had administered many of the instruments to the students who had dropped out. I will report the data I collected but will not run any statistical analysis for obvious reasons.

For the purpose of data analysis, I added a point value to the responses. Five points were attributed to strongly agree, four points to agree, three points to neither agree nor disagree, 2 points to disagree, and 1 point to strongly disagree.

## Demographics

The first four questions of the multi-focus inventory were demographic question. The enrolled students who completed the multi-focus inventories were very similar to the dropouts who completed the multi-focus inventories in both ethnicity and gender. There were a higher percentage of ninth-grade students who dropped out who completed the survey. That is understandable as, historically, more students drop out of the ninth and tenth grade than upperclassmen. See Figure 3 for surveyed students' demographics.
Surveyed
Enrolled
Students' Grade


Figure 3. Surveyed Students' Demographics

## Means and Standard Deviations

Descriptive statistics for each question are provided in Table 10.

Table 10. Means and Standard Deviations of the Questions

| 8 | $\begin{aligned} & 0 \\ & 0.0 \\ & 0.0 \\ & 0 . \end{aligned}$ | Enrolled Sample Size | $\begin{aligned} & \text { 저 } \\ & 0 \\ & 0 \\ & 0 \\ & 0 \\ & 2 \\ & 0 \\ & 0 \\ & 0 \end{aligned}$ |  | 0 0 0 0 0 0 0 0 0 0 0 |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 5 Belonging | I feel accepted for who I am at school. | 991 | 3.90 | 1.18 | 41 | 3.32 | 1.25 |


| 6 | Belonging | I have difficulty fitting in at school. | 991 | 2.15 | 1.19 | 41 | 2.51 | 1.21 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 7 | Belonging | School is a welcoming and friendly place. | 991 | 3.35 | 1.17 | 41 | 3.22 | 1.22 |
| 8 | Belonging | I am proud of my school. I have been | 991 | 3.50 | 1.19 | 41 | 3.12 | 1.14 |
| 9 | Belonging | bullied at school. | 0 |  |  | 41 | 2.29 | 1.25 |
| 16 | Confidence to Take Action | My teacher expects me to do my best. | 991 | 4.10 | 1.08 | 41 | 3.61 | 1.07 |
| 19 | Confidence to Take Action | School is preparing me well for my future. | 991 | 3.90 | 1.12 | 40 | 3.10 | 1.30 |
| 14 | Curiosity \& Creativity | At school, I am encouraged to be creative. | 991 | 3.50 | 1.17 | 41 | 3.20 | 1.15 |
| 18 | Curiosity \& Creativity | My classes help me understand what is happening in my everyday life. | 991 | 3.39 | 1.20 | 41 | 3.10 | 1.22 |
| 11 | Fun \& Excitement | I enjoy being at school. | 991 | 3.28 | 1.24 | 41 | 3.15 | 1.32 |
| 13 | Fun \& Excitement | School is boring. | 991 | 3.12 | 1.21 | 41 | 3.17 | 1.28 |
| 24 | Fun \& Excitement | Teachers enjoy working with students. | 991 | 3.60 | 1.06 | 40 | 3.18 | 1.13 |
| 25 | Fun \& Excitement | Teachers make school an exciting place to learn. | 991 | 3.20 | 1.17 | 40 | 2.88 | 1.11 |
| 20 | Heroes | Teachers care about me as an individual. | 991 | 3.47 | 1.18 | 40 | 3.18 | 1.24 |
| 21 | Heroes | Teachers care if I am absent from school. | 991 | 3.30 | 1.23 | 40 | 3.28 | 1.28 |


| 22 | Heroes | If I have a problem, I have a teacher with whom I can talk. | 991 | 3.38 | 1.35 | 40 | 3.25 | 1.37 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 23 | Heroes | I have a teacher who is a positive role model for me. | 991 | 3.58 | 1.24 | 40 | 3.18 | 1.30 |
| 26 | Heroes | Teachers respect students. | 991 | 3.44 | 1.16 | 40 | 3.08 | 1.23 |
| 27 | Heroes | Students respect teachers. | 991 | 2.78 | 1.17 | 40 | 2.93 | 1.10 |
| 28 | Heroes | Students respect each other. | 991 | 2.62 | 1.17 | 41 | 2.85 | 1.13 |
| 10 | Leadership \& Responsibility | I know the goals my school is | 0 |  |  | 40 | 2.73 | 1.24 |
| 12 | Sense of Accomplishment | working on. <br> I have never been recognized for something positive at school. | 991 | 2.50 | 1.24 | 40 | 3.08 | 1.37 |
| 31 | Sense of Accomplishment | I put forth my best effort at school. | 991 | 3.88 | 1.08 | 41 | 3.34 | 1.13 |
| 30 | Spirit of Adventure | I push myself to do better academically. | 991 | 3.98 | 1.06 | 41 | 3.20 | 1.10 |
| 32 | Spirit of Adventure | I am excited to tell my friends when I get good grades. | 991 | 3.60 | 1.21 | 41 | 3.61 | 0.95 |
| 33 | Spirit of Adventure | I am afraid my friends will not like me if I do well in school. | 991 | 1.83 | 1.132 | 41 | 1.88 | 0.95 |
| 34 | The Role of Parents | My parents care about my education. | 991 | 4.46 | 1.03 | 41 | 4.17 | 1.07 |
| 35 | The Role of Parents | My parents think going to | 991 | 4.46 | 1.01 | 41 | 4.02 | 1.01 |

college is
important.
My parents
36 The Role of
feel
$\begin{array}{lllllll}\text { comfortable } & 991 & 3.84 & 1.15 & 41 & 3.61 & 1.07\end{array}$
talking to my
teachers.

The descriptive statistics for each scale are provided below. The enrolled students rated each of the dimensions higher than the dropouts in all but one category, Sense of Accomplishment.

Table 11. Means and Standard Deviations of the Conditions

|  | M 0 0 0 0 0 0 0 0 0 0 0 | $\begin{aligned} & \text { 010 } \\ & 0 \\ & \frac{0}{0} \\ & 2 \\ & 2 \\ & 0 \\ & 0 \\ & 0 \end{aligned}$ |  |  | $\begin{aligned} & \underset{0}{0} \\ & \stackrel{0}{0} \\ & 0 \\ & 3 \\ & 0 \\ & 0: 0 \end{aligned}$ |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Belonging | 3964 | 3.22 | 1.35 | 164 | 3.04 | 1.24 |
| Confidence to Take Action | 1982 | 4.00 | 1.11 | 81 | 3.36 | 1.21 |
| Curiosity \& Creativity | 1982 | 3.45 | 1.18 | 82 | 3.15 | 1.18 |
| Fun \& Excitement | 3964 | 3.30 | 1.19 | 162 | 3.09 | 1.21 |
| Heroes | 6937 | 3.23 | 1.26 | 281 | 3.10 | 1.23 |
| Leadership \& Responsibility | 0 | No Data | No Data | 40 | 2.72 | 1.24 |
| Sense of Accomplishment | 1982 | 3.19 | 1.35 | 81 | 3.21 | 1.25 |
| Spirit of Adventure | 2973 | 3.14 | 1.47 | 123 | 2.89 | 1.24 |
| The Role of Parents | 2973 | 4.25 | 1.10 | 123 | 3.93 | 1.07 |

## Chi-square Analysis

The chi-square test is a test statistic for categorical data that is used when a researcher wants to see if there are statistically significant differences between observed frequencies and the expected frequencies (Vogt, 2005). For the current design, a chisquare statistic greater than 9.49 would indicate significance. The p-value is short for probability. It is the probability a corresponding result would be found if the null hypothesis were true. The Bonferroni correction is a method for ensuring multiple comparisons made of a single data set do not lead to inflated levels of significance. The two tables below rank the individual questions from largest chi-square statistic to smallest. Table 12 contains the chi-square values above 9.49, and Table 13 contains the chi-square values below 9.49.

Table 12. Chi-Square Results High

| Number | Condition | Question | $N$ | $X^{2}$ | pvalue | Bonferroni correction |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 30 | Spirit of Adventure | I push myself to do better academically. | 1032 | 68.22 | 0.000 | 0.000 |
| 31 | Sense of <br> Accomplishment | I put forth my best effort at school. | 1032 | 46.50 | 0.000 | 0.000 |
| 35 | The Role of Parents | My parents think going to college is important. | 1032 | 43.24 | 0.000 | 0.000 |
| 16 | Confidence to Take Action | My teacher expects me to do my best. | 1032 | 23.34 | 0.000 | 0.003 |
| 19 | Confidence to <br> Take Action | School is preparing me well for my future. | 1031 | 19.74 | 0.001 | 0.014 |
| 23 | Heroes | I have a teacher who is a positive role model for me. | 1031 | 19.41 | 0.001 | 0.016 |
| 32 | Spirit of Adventure | I am excited to tell my friends when I get good grades. | 1032 | 18.68 | 0.001 | 0.024 |


| 12 | Sense of Accomplishment | I have never been recognized for something positive at school. | 1031 | 17.64 | 0.001 | 0.027 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 34 | The Role of Parents | My parents care about my education. | 1032 | 16.58 | 0.002 | 0.054 |
| 5 | Belonging | I feel accepted for who I am at school. | 1032 | 16.23 | 0.003 | 0.081 |
| 33 | Spirit of Adventure | I am afraid my friends will not like me if I do well in school. | 1032 | 15.07 | 0.004 | 0.108 |
| 36 | The Role of Parents | My parents feel comfortable talking to my teachers. | 1032 | 12.11 | 0.017 | 0.432 |
| 6 | Belonging | I have difficulty fitting in at school. | 1032 | 11.43 | 0.022 | 0.594 |
| 20 | Heroes | Teachers care about me as an individual. | 1031 | 10.55 | 0.032 | 0.864 |
| 8 | Belonging | I am proud of my school. | 1032 | 10.51 | 0.033 | 0.891 |

Table 13. Chi-Square Results Low

| Number | Condition | Question | $N$ | $x^{2}$ | $\boldsymbol{p}-$ <br> value <br>  <br> Excitement | Teachers enjoy working <br> with students. |
| :--- | :--- | :--- | :---: | :---: | :---: | :---: |
| 24 | 1031 | 7.34 | $\mathbf{0 . 1 1 9}$ | 1.000 |  |  |
| 22 | Heroes | If I have a problem, I <br> have a teacher with | 1031 | 6.04 | $\mathbf{0 . 1 9 7}$ | 1.000 |
| 26 | Heroes | whom I can talk. <br> Teachers respect <br> students. | 1031 | 5.41 | $\mathbf{0 . 2 4 8}$ | 1.000 |
| 11 |  <br> Excitement | I enjoy being at school. | 1032 | 4.72 | $\mathbf{0 . 3 1 8}$ | 1.000 |
| 14 |  <br> Creativity | At school, I am <br> encouraged to be <br> creative. | 1032 | 4.63 | $\mathbf{0 . 3 2 7}$ | 1.000 |
| 21 | Heroes | Teachers care if I am <br> absent from school. | 1031 | 4.02 | $\mathbf{0 . 4 0 3}$ | 1.000 |


| 25 |  <br> Excitement | Teachers make school an exciting place to learn. | 1031 | 3.95 | 0.413 | 1.000 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 13 |  <br> Excitement | School is boring. | 1032 | 3.54 | 0.473 | 1.000 |
| 28 | Heroes | Students respect each other. | 1032 | 3.06 | 0.548 | 1.000 |
| 18 | Curiosity \& Creativity | My classes help me understand what is happening in my everyday life. | 1032 | 2.88 | 0.578 | 1.000 |
| 7 | Belonging | School is a welcoming and friendly place. | 1032 | 2.41 | 0.661 | 1.000 |
| 27 | Heroes | Students respect teachers. | 1031 | 1.33 | 0.856 | 1.000 |
| 9 | Belonging | I have been bullied at school. | 41 | No <br> Data | No <br> Data | No Data |
| 10 | Leadership \& Responsibility | I know the goals my school is working on. | 40 | No <br> Data | No <br> Data | No Data |

## Confidence to Take Action

"Confidence to Take Action is the extent to which students believe in themselves"
(Quaglia Institute, 2008). There were two questions related to this dimension, and both showed statistical significance, "My teacher expects me to do my best" [chi-square (4, $\mathrm{N}=1032$ ) $=23.34, \mathrm{p}<0.05$ ] and "School is preparing me well for my future" [chi-square $(4, N=1031)=19.74, p<0.05]$. These results imply the students who were still enrolled in school have more confidence to take action than the students who had dropped out of school.

## The Role of the Parent

All three questions dealing with the role of the parents showed statistically significant chi-square statistics, "My parents think going to college is important" [chisquare $(4, \mathrm{~N}=1032)=43.24, \mathrm{p}<0.05$ ], "My parents care about my education" [chi-square $(4, \mathrm{~N}=1032)=16.58, \mathrm{p}<0.05]$, and "My parents feel comfortable talking to my teachers" [chi-square (4, $\mathrm{N}=1032$ ) = 12.11, $\mathrm{p}<0.05$ ]. These results imply the students who were still enrolled in school perceived their parents played a larger role in their education than the students who had dropped out of school.

## Curiosity and Creativity

The condition of Curiosity \& Creativity is characterized by the student's inquisitiveness, eagerness, a strong desire to learn new and interesting things, and a longing to satisfy the mind with new discoveries (Quaglia Institute, 2008). Neither of the two individual questions had a statistically significant chi-square statistic, "At school I am encouraged to be creative" [chi-square $(4, \mathrm{~N}=1032)=4.63, \mathrm{p}>0.05$ ] and "My classes help me understand what is happening in my everyday life" [chi-square (4, N=1032) = 2.88, $\mathrm{p}>0.05$ ]. These results imply the students who were still enrolled in school had statistically the same perception of their curiosity and creativity, as did the students who had dropped out of school.

## Fun and Excitement

The condition of Fun \& Excitement is characterized by the student being inspired to learn (Quaglia Institute, 2008). This is another dimension where the four individual questions all had chi-square statistics that were not statistically significant, "Teachers enjoy working with students" [chi-square ( $4, \mathrm{~N}=1031$ ) $=7.34, \mathrm{p}>0.05$ ), "I enjoy being at
school" [chi-square ( $4, \mathrm{~N}=1032$ ) $=4.72, \mathrm{p}>0.05$ ], "Teachers make school an exciting place to learn" [chi-square (4, N=1031) = 3.95, p > 0.05], and "School is boring" [chisquare $(4, \mathrm{~N}=1032)=3.54, \mathrm{p}>0.05]$. These results imply the students who were still enrolled in school did not differ statistically in perception from the students who had dropped out of school.

## Spirit of Adventure

The Spirit of Adventure is characterized by the students' ability to take on positive, healthy challenges at school and home, with family and friends (Quaglia Institute, 2008). Each of the three questions did have statistically significant chi-square values including the highest chi-square value of any individual question, "I push myself to do better academically" [chi-square $(4, \mathrm{~N}=1032)=68.22, \mathrm{p}<0.05$ ], "I am excited to tell my friends when I get good grades" [chi-square(4, N=1032) = 18.68, p $<0.05$ ), and "I am afraid that my friends will not like me if I do well in school" [chi-square(4, N=1032) $=15.07, \mathrm{p}<0.05]$. These results imply the students who were still enrolled in school perceive they have more spirit of adventure than the students who had dropped out of school.

## Belonging

Belonging means a student is a valued member of a community, while still maintaining his or her uniqueness (Quaglia Institute, 2008). Three of the individual questions did have chi-square statistics that had statistical significance, "I feel accepted for who I am at school" [chi-square $(4, \mathrm{~N}=1032)=16.23, \mathrm{p}<0.05$ ], "I have difficulty fitting in at school" [chi-square $(4, \mathrm{~N}=1032)=11.43, \mathrm{p}<0.05$ ], "I am proud of my
school" [chi-square $(4, \mathrm{~N}=1032)=10.51, \mathrm{p}<0.05$ ] indicating the students who were still enrolled in school perceive they have more belonging than students who have dropped out of school. One of the questions "School is a welcoming and friendly place" [chisquare $(4, \mathrm{~N}=1032)=2.41, \mathrm{p}>0.05$ ] did not have a statistical difference indicating the students who dropped out of school have the same perception about school being welcoming and friendly as the students who dropped out of school.

## Heroes

Heroes are the everyday people. They can be teachers, friends, family, or anyone in students' lives who inspire them to excel and to make positive changes in attitudes and lifestyles (Quaglia Institute, 2008). Two of the individual questions did have chi-square statistics that had statistical significance indicating students who were still enrolled in school perceive they have more heroes than student who dropped out of school, "I have a teacher who is a positive role model for me" [chi-square (4, $\mathrm{N}=1031$ ) $=19.41, \mathrm{p}<0.05$ ], "Teachers care about me as an individual" [chi-square (4, $\mathrm{N}=1031$ ) $=10.55, \mathrm{p}<0.05$ ], while five of the questions did not have a statistically difference, "If I have a problem I have a teacher with whom I can talk" [chi-square $(4, \mathrm{~N}=1031)=6.04, \mathrm{p}>0.05$ ], "Teachers respect students" [chi-square $(4, \mathrm{~N}=1031)=5.41, \mathrm{p}>0.05$ ], "Teachers care if I am absent from school" [chi-square $(4, \mathrm{~N}=1031)=4.02, \mathrm{p}>0.05$ ], "Students respect each other" [chi-square (4, N=1032) = 3.06, p > 0.05], and "Students respect teachers" [chisquare $(4, \mathrm{~N}=1031)=1.33, \mathrm{p}>0.05]$.

## Leadership and Responsibility

The condition of Leadership \& Responsibility means students are allowed to express their ideas and are willing to accept consequences for their actions (Quaglia Institute, 2008). The Central North Carolina School District removed the one question dealing with Leadership and Responsibility before the administration of the multi-focus inventory.

## Sense of Accomplishment

The Condition of Sense of Accomplishment recognizes the effort, perseverance, and citizenship along with academic achievement as signs of student success (Quaglia Institute, 2008). Both individual questions had a chi-square statistics that were statistically significant. "I put forth my best effort at school [chi-square (4, N=1032) = 46.50, $\mathrm{p}<0.05$ ] and "I have never been recognized for anything positive at my school" [chi-square $(4, \mathrm{~N}=1031)=17.64, \mathrm{p}<0.05$ ]. These results imply the students who were still enrolled in school perceive they have a greater sense of accomplishment than the students who had dropped out of school.

## T-Statistic

The t-test is a test of statistical significance for the difference between two groups of means (Vogt, 2005). I grouped the questions by each of the 8 Conditions. I found the mean and the variance for each of the 8 Conditions for the students still enrolled and for the students who have already dropped out of school. I performed an independent t-test on the grouped means. I then compared the t-statistic with the appropriate critical value to determine if the difference in means could be due to random chance if the null hypothesis were true. Cohen's $d$ estimates the strength of an apparent relationship in t-tests by
dividing the two t-statistics multiplied times two by the square root of the degrees of freedom. The p-value is short for probability. The Bonferroni correction is a method for testing the statistical significance of multiple comparisons. Table 14 contains the dimensions sorted from highest to lowest t -value. The table also contains the p -value, Bonferroni's correction, and Cohen's $\hat{d}$.

## Table 14. T-Statistic

|  | t-value | $\boldsymbol{p}$-value | Bonferroni <br> correction | Cohen’s $\hat{d}$ |
| :--- | :---: | ---: | :---: | :---: |
| Condition | 5.088 | $\mathbf{0}$ | 0.000 | 0.224 |
| Confidence to Take Action | 3.137 | $\mathbf{0 . 0 0 2}$ | 0.016 | 0.113 |
| The Role of Parents | 2.269 | $\mathbf{0 . 0 2 3}$ | 0.184 | 0.100 |
| Curiosity \& Creativity | 2.150 | $\mathbf{0 . 0 3 2}$ | 0.256 | 0.067 |
| Fun \& Excitement | 1.827 | $\mathbf{0 . 0 6 8}$ | 0.544 | 0.066 |
| Spirit of Adventure | 1.694 | $\mathbf{0 . 0 9 0}$ | 0.720 | 0.053 |
| Belonging | 1.587 | $\mathbf{0 . 1 1 3}$ | 0.904 | 0.037 |
| Heroes | -0.105 | $\mathbf{0 . 9 1 6}$ | 1.000 | -0.005 |
| Sense of Accomplishment | No Data | No Data | No Data |  |
| Leadership \& Responsibility | No Data |  |  |  |

## Confidence to Take Action

"Confidence to Take Action is the extent to which students believe in themselves"
(Quaglia Institute, 2008). The researcher investigated the relationship between the students' perception of their confidence to take action and the students' enrollment status. The researcher surveyed 991 enrolled students and 41 students who had dropped out of school. Each student completed a multi-focus affective inventory. Results showed the
mean of the enrolled students' perception was $4.00(S D=1.106)$ while the students who had dropped out had a mean of $3.36(S D=1.207)$. Cohen's $d$ applied to the difference was 0.224 , indicating the enrolled students' mean was over one-fifth of a standard deviation higher than the dropouts' mean. A t-test on the difference between the means was statistically significant $[\mathrm{t}(2061)=5.088, \mathrm{p}<0.05$ ]. This result implies the students who were still enrolled in school have more confidence to take action than the students who had dropped out of school.

## The Role of the Parent

The researcher investigated the relationship between the students’ perception of the role of their parents and the students' enrollment status. The researcher surveyed 991 enrolled students and 41 students who had dropped out of school. Each student completed a multi-focus affective inventory. Results showed the mean of the enrolled students' perception was 4.25 ( $s d=1.104$ ) while the students who had dropped out had a mean of 3.93 (sd = 1.069). Cohen's $d$ applied to the difference was 0.113 , indicating the enrolled students' mean was over one-tenth of a standard deviation higher than the dropouts’ mean. A t-test on the difference between the means was statistically significant [t (3094) $=3.137, \mathrm{p}<0.05]$. This result implies the parents of students who were still enrolled in school played a greater role in their education than the parents of the students who had dropped out of school.

## Curiosity and Creativity

The condition of Curiosity \& Creativity is characterized by the student's inquisitiveness, eagerness, a strong desire to learn new and interesting things, and a longing to satisfy the mind with new discoveries (Quaglia Institute, 2008). The researcher investigated the relationship between the students’ perception of curiosity and creativity and the students' enrollment status. The researcher surveyed 991 enrolled students and 41 students who had dropped out of school. Each student completed a multi-focus affective inventory. Results showed the mean of the enrolled students' perception was 3.45 ( $\mathrm{SD}=$ 1.184) while the students who had dropped out had a mean of $3.15(S D=1.177)$. Cohen's d applied to the difference was 0.100 , indicating the enrolled students' mean was onetenth of a standard deviation higher than the dropouts' mean. A t-test on the difference between the means was statistically significant [t 2062 ) $=2.269, \mathrm{p}<0.05$ ]. Although the $p(0.023)<0.05$ when applying Bonferroni’s correction the adjusted $p(0.184)>0.05$. This result implies the students who were still enrolled in school could not be confidently described as having different curiosity and creativity from the students who had dropped out of school.

## Fun and Excitement

The condition of Fun \& Excitement is characterized by the student being inspired to learn (Quaglia Institute, 2008). The researcher investigated the relationship between the students' perception of fun and excitement and the students' enrollment status. The researcher surveyed 991 enrolled students and 41 students who had dropped out of school. Each student completed a multi-focus affective inventory. Results showed the mean of the enrolled students' perception was $3.30(S D=1.185)$ while the students who
had dropped out had a mean of $3.09(S D=1.210)$. A t-test on the difference between the means was statistically significant $[\mathrm{t}(4127)=2.150, p<0.05]$. Although the $p(0.032)<$ 0.05 when applying Bonferroni's correction the adjusted $p(0.256)>0.05$. This result implies the students who were still enrolled in school could not be confidently described as having different fun and excitement from the students who had dropped out of school.

## Spirit of Adventure

The Spirit of Adventure is characterized by the students' ability to take on positive, healthy challenges at school and home, with family and friends (Quaglia Institute, 2008). The researcher investigated the relationship between the students’ perception of spirit of adventure and the students' enrollment status. The researcher surveyed 991 enrolled students and 41 students who had dropped out of school. Each student completed a multi-focus affective inventory. Results showed the mean of the enrolled students' perception was $3.14(S D=1.472)$ while the students who had dropped out had a mean of $2.89(S D=1.240)$. A t-test on the difference between the means was not statistically significant $[\mathrm{t}(3094)=1.827, \mathrm{p}>0.05]$. This result implies the students who were still enrolled in school could not be confidently described as having different spirit of adventure from the students who had dropped out of school.

## Belonging

Belonging means a student is a valued member of a community, while still maintaining his or her uniqueness (Quaglia Institute, 2008). The researcher investigated the relationship between the students' perception of belonging and the students’ enrollment status. The researcher surveyed 991 enrolled students and 41 students who
had dropped out of school. Each student completed a multi-focus affective inventory. Results showed the mean of the enrolled students' perception was 3.22 ( $S D=1.348$ ) while the students who had dropped out had a mean of $3.04(S D=1.235)$. A t-test on the difference between the means was not statistically significant [t (4126) $=1.694, \mathrm{p}>$ 0.05]. This result implies the students who were still enrolled in school could not be confidently described as having different sense of belonging from the students who had dropped out of school.

## Heroes

Heroes are the everyday people. They can be teachers, friends, family, or anyone in students' lives who inspire them to excel and to make positive changes in attitudes and lifestyles (Quaglia Institute, 2008). The researcher investigated the relationship between the students' perception of heroes and the students' enrollment status. The researcher surveyed 991 enrolled students and 41 students who had dropped out of school. Each student completed a multi-focus affective inventory. Results showed the mean of the enrolled students' perception was $3.23(S D=1.263)$ while the students who had dropped out had a mean of $3.10(S D=1.233)$. A t-test on the difference between the means was not statistically significant $[\mathrm{t}(7216)=1.587, \mathrm{p}>0.05]$. This result implies the students who were still enrolled in school could not be confidently described as having a different value of heroes from the students who had dropped out of school.

## Sense of Accomplishment

The Condition of Sense of Accomplishment recognizes the effort, perseverance, and citizenship along with academic achievement as signs of student success (Quaglia Institute, 2008). The researcher investigated the relationship between the students' perception of sense of accomplishment and the students' enrollment status. The researcher surveyed 991 enrolled students and 41 students who had dropped out of school. Each student completed a multi-focus affective inventory. Results showed the mean of the enrolled students' perception was $3.19(S D=1.353)$ while the students who had dropped out had a mean of $3.21(S D=1.252)$. A t-test on the difference between the means was not statistically significant [t (2061) $=-0.105, \mathrm{p}>0.05$ ]. This result implies the students who were still enrolled in school could not be confidently described as having different sense of accomplishment from the students who had dropped out of school.

## Leadership and Responsibility

The condition of Leadership \& Responsibility means students are allowed to express their ideas and are willing to accept consequences for their actions (Quaglia Institute, 2008). The Central North Carolina School district removed the one question dealing with Leadership and Responsibility before the administration of the multi-focus inventory.

## CHAPTER V

## CONCLUSIONS

## General Conclusions

A lack of success in school is noted as one of the reasons that students drop out of school (Tanner et al, 2003). The Quaglia Institute claims that the 8 Conditions are vital for students to be successful in school (Quaglia Institute, 2008). This study examined students' perception of the 8 Conditions, and then compared the responses of students who stayed in school with the results of students who dropped out of school.

This study found mixed results in trying to connect the 8 Conditions for student success, with decisions to drop out of school. Although the 8 Conditions might be necessary for school success, they might not be the determining factors when making the decision to drop out of school. Confidence to Take Action was the only one of the stated 8 conditions that showed statistical significance in each of the statistical analyses. Another dimension, the Role of the Parent also showed statistical significance in each test, but this dimension is not one of the original 8 Conditions but was later added as also being important (Quaglia Institute, 2008). Given the abundance of published articles supporting Quaglia’s claims (Plucker, 1996) (Plucker, 1996, 1998; Quaglia Institute, 2008) it is surprising that only two of the nine dimensions showed a clear statistical difference in the two tests regarding students' perceptions.

That is not to say the other dimensions do not have any worth. In fact, some did have mixed statistical results, which could support their importance. Despite not having statistically significant t-test results on the entire scale, the spirit of adventure (three of three tests), sense of accomplishment (two of two tests), and belonging (three of four tests) all had a majority of questions with statistically significant chi-square results indicating enrolled students had a higher perception of those dimensions in their lives than did dropouts.

Three of the dimensions did not have statistically different t-test or chi-square results: curiosity and creativity, fun and excitement, and heroes. There could be several explanations for these results. The first reason could be the survey instrument itself. This study did not use the complete instrument the Quaglia institute publishes—it used a modified version developed by a local education agency. As stated earlier, the modified version of the multi-focus inventory neglected many commonly accepted practices of proper instrument construction.

Another reason this sample of students did not show a statistical difference could be due to the efforts of the school system where the students were enrolled. The school system has worked to improve the school experience for students for years. The school system has partnered with communities in schools to provide mentors for at-risk students. It began using the A.V.I.D. (Advancement via Individualized Determination) in the middle schools six years earlier. A.V.I.D. pushes students who would be the first in their families to go to college to take classes that are more rigorous, and provides tutors to help the students be successful in the harder classes. The school system has embraced
G.E.A.R. U.P. (Gaining Early Awareness and Readiness for Undergraduate Programs) since 2005 to help students set goals to attend college and develop skills to help them succeed once they get there. The school system's high school started a small learning community in 2007. Located away from the main campus, the small learning community works to capitalize on its size to foster relationships between the students and the teachers while providing student led inquiry-based instruction. It could be that the lack of statistical differences in the measured dimensions has more to do with the improved climate from which all students benefit, than the lack of importance of the dimensions. It could be that in spite of the school systems efforts, other factors have affected the lives of the students to a greater extent, causing them to make the decision to drop out.

The dimension with the statistical evidence indicating a difference in the way current students and dropouts perceive school, is the dimension Confidence to Take Action. This condition encourages students to dream about their future while being motivated to set goals in the present (Quaglia Institute, 2008). This appears to have face validity as students who have made the decision to drop out would have less confidence in a school setting. The connection between confidence to take action and student success is not surprising to me as an educator or as a researcher. Anecdotally, as an educator, the students who came to class with a plan for the future seemed to do well in my classes. They appeared to be more driven to succeed than students who did not have a goal for the future. This theory manifested itself in my own higher education. When I went to college, I was unsure as to what I wanted to be when I grew up. I even changed my major three times in my first year of college. My GPA was weak to say the least. When I finally
figured out what I wanted to do, my grades improved immediately. The research I conducted for the literature review also supports this study's results. Nesman et al. (2001) noted the difference in the Latino students. Those who desired to be successful in school had the confidence to adapt to different schools and to build relationships on their own without assistance from others.

The study also identified statistical support that the role of parents has an effect on students. This is also not a surprise. Numerous articles support the importance of parents in the success of their children. Nesman et al. (2001) found a lack of parental support was noted by students as part of the reason they dropped out of school. Jamie Lew (2007) also reported the impact a lack of parental support has on student performance. She noted many of the parents of the Korean American students who dropped out of school were not active in their children's educational pursuits. Annette Lareau (2003) found the inverse to also be true as students in her study who had strong parental support for education were successful in school.

The surprise of the study came in the other dimensions that had mixed statistical results. The reasons for mixed statistical results were not discovered by this survey. Any attempt to infer the reasons based on this limited study would be unfounded. This researcher was not able find prior research from a similar study. Previous research was limited to students who were still enrolled in school. Despite the lack of statistical clarity, there is still ample research that extols the importance of traits that are used to describe the other conditions.

Belonging, defined as a relationship between two or more persons characterized by a sense of connection and support (Quaglia Institute, 2008), had mixed statistical support. Although the dropouts did not have statistically different t-test results, they did have three out of four questions with statistically different chi-square results. Experience and research appears to back of the positive affect of belonging in the lives of students. As an educator, I have been told the importance of relationships and getting a student involved in the school. As a former coach, I have heard many times, "athletics is the greatest dropout prevention program." Gallagher (2001) stressed the importance of students having relationships with caring adults calling them essential. Lew (2007) stressed the importance of heroes when she noted providing students with social support such as counselors or access to teachers, is pivotal for academic success.

The second dimension with a lack of statistical clarity was the sense of accomplishment, which recognizes the effort, perseverance, and citizenship along with academic achievement as signs of student success. The students who dropped out did not have answers that differed enough from the enrolled students to show a statistical difference in the t-test, but there was enough difference in the results to have a significant chi-square result. This dimension did have an unusual result, if not statistically relevant. Students who had dropped out of school actually had a higher mean than the students who were still enrolled, although statistically speaking there was not a difference. Although the dropouts had a higher mean, it would be irresponsible to try to determine the reason since statistically speaking the results were the same.

Spirit of Adventure, characterized by the students' ability to take on positive, healthy challenges at school and home, with family and friends was another dimension with a lack of statistical clarity (Quaglia Institute, 2008). Again, this dimension did not have a significant t-statistic while both questions did have significant chi-square results.

Heroes, defined as having people with whom students can connect, who have a positive influence on them, and who listen to and value their ideas, is the condition that surprised me the most as not having a statistically significant difference. It did not have a statistically different $t$ statistic or chi-square result. The reason that the results surprised me is that I closely relate the heroes dimension with the belonging dimension. This lack of statistical support could be due to the efforts of the school system stated earlier, a flawed instrument, or to undiscovered factors.

I was not personally surprised by the other conditions not having statistical significance. Although Gallagher (2001), Annette Lareau (2003), and Michelle Fine (1991) all have support for the importance or Curiosity and Creativity, it has not been my experience that that domain is important for student success. Stronge and Reed-Victor (2000) supported Fun and Excitement as they stressed the importance of creating a climate where students wanted to be, even after the regular school day. My experiences suggest even the best students and many teachers, look forward to snow days and summer vacation. Most schools cannot compete with what goes on outside of school building. Ogden and Germinario (1988) noted the benefits of having a spirit of adventure and the resulting high achievement. Concluding the lack of statistical difference was the result of all students having this dimension stifled, would need more research.

## Implications and Final Thoughts

I have been affected by experiencing firsthand the quotes cited in chapter 3 that carried the general message "no one tried to talk me into staying in school." As I went to the dropouts houses to ask them to complete the survey, I carried another message, "I think it is important for you to come back to school." Since the study concluded, I have been contacted by 15 of the dropouts who have said they want to come back. I encouraged them to go to the central North Carolina High School and re-enroll. Several have done just that. I have been disturbed when three of the students came back to my office and told me they were encouraged to remain dropouts. They were counseled to enter an adult high school program or get their general education diploma (GED) because of their lack of credits, they could not graduate on time. This mirrors the findings Michelle Fine (1991) who addressed push out factors in her book Framing Dropouts: Notes on the Politics of Urban School Reform and Jamie Lew (2007) who noted in her study students suffered from inadequate counseling services.

Fine (1991) found in her study, administrators encouraged many students to leave school and did not encourage other students to stay when students asked about dropping out. When I visited one home, the parent told me her daughter did not drop out of school, but she was told she could not come back. Fine found the same during her research even quoting an office aid in the school as having stated, "I don't know why they call them dropouts, when we make them go."

Lew (2007) noted students did not receive adequate counseling services. In fact, many were advised to leave school early and encouraged to take the general education
development (GED) exam instead of finishing their high school classes. Students were given this advice because of the school's perception the students were not interested in school, the student had a low academic achievement, and the likelihood the student could not graduate on time.

I also have been disturbed at the perception that parents have that attaining a GED is equivalent to a high school education. A number of parents told me their children did not drop out because they were in a GED program. This finding again mirrored the findings of Jamie Lew. Lew (2007) found the students in her study were under the impression a general education development (GED) certificate and a high school diploma were equivalent.

The last finding I had deals with the economic conditions that affect the lives of the students who dropped out of school. Nine of the addresses had either eviction notices or notices from the power company that the power would be turned off, unless the bill was paid. Thirty-one of the addresses were in government run low rent apartments, known as projects. Many did live in residential homes. I used the local Geographic Inquiry System (GIS) website to look up the value of the homes. One of the homes had a value of $\$ 12,120$. Seven homes ranged in value from $\$ 32,870--\$ 45,820$. Fifteen more ranged from $\$ 50,090$ - \$69,610. In fact, only eight of the 89 dropouts lived in houses over $\$ 132,026$, the average estimated home value in the city (America Online, 2009). As stated earlier, "life" might have finally caught up with the students with school taking a backseat to survival.

As stated before, I would like the study to be meaningful. In reality, my project included one group of former students, in a twenty-one square mile area, who made the decision to drop out of school during a 12-month period, and a group of enrolled students in one high school during the same period. This study was not designed to be comprehensive and investigate every reason that causes a student to drop out of school. I do not pretend the results of this project are relevant to all schools for all time. The results of this study are relevant to a small school system in rural North Carolina, in 2009. To be able to identify accurately the reasons students drop out of school, a better-designed multi-focus inventory, or actual student interviews would be required. A study comprehensive enough to draw conclusions to initiate sweeping change would require a longitudinal study carried out throughout the county.

This study does validate the importance of the child's first teacher, the parent. This should serve as catalyst for administrators to wake up the sleeping giant and find ways to encourage parents to be more involved in their children's education. This might involve admitting that we, as educators, do not hold all of the answers. This might require becoming more inviting (Purkey \& Novack, 1984). It certainly will require more effort.

This study also re-enforces Michelle Fine’s (1991) work that showed how dropout prevention starts with school officials. School officials have to want all students to attend the school. School officials have to stop talking about the benefits of the GED. School officials have to believe enough in their school to believe that the student is better for each day they remain in the school.

When thinking about the students who did not return this year after visiting their houses this summer, it is easy to get discouraged. I have to think back to the story of the starfish, a story whose origin is debated, but is attributed to Loren Eiseley's (1978) The Star Thrower.

While walking along a beach an elderly man saw someone in the distance who had leaned down, picked something up, and threw it into the ocean. As he got closer, he noticed the figure was that of a young man. The young man was picking up starfish one by one and tossing each one gently back into the water. He came closer still and called out, "Good morning! May I ask what it is you are doing?" The young man paused, looked up, and replied, "Throwing starfish into the ocean." The old man smiled and said, "I must ask, then, why are you throwing starfish into the ocean?" To this the young man replied, "The sun is up and the tide is going out. If I don’t throw them in they'll die." Upon hearing this, the elderly observer commented, "But young man, do you not realize there are miles and miles of beach and there are starfish all along every mile? You can't possibly make a difference!" The young man listened politely. Then he bent down, picked up another starfish, threw it into the back into the ocean past the breaking waves, and said, "It made a difference for that one."

Students are washing out of school and onto the shore of life every day. The sun of poverty and hopelessness without an education are killing them. The question is, "What are we going to do different to make the difference and save the life a student who wants to drop out of school?

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## Appendix A

## Survey

Please do not write your name on this survey.

| Number | Answer | Question |
| :---: | :---: | :---: |
| 1 | $\begin{gathered} \quad \text { AHS } \\ \_ \\ \hline \\ \text { NAMS } \\ \text { SAMS } \end{gathered}$ | Please select your school. |
| 2 | $\begin{gathered} \hline-9 \\ -10 \\ -11 \\ \hline-12 \end{gathered}$ | What grade are you in? |
| 3 | $\begin{aligned} & \mathrm{M} \\ & \hline \mathrm{~F} \\ & \hline \end{aligned}$ | What is your gender? |
| 4 | __African American __American Indian __Asian __Hispanic __Other _Ohitial White, non-Hispanic | What is your ethnicity? |
| 5 | __Strongly Agree __Agree __No Opinion __Disagree _Strongly Disagree | I feel accepted for who I am at school. |
| 6 | __Strongly Agree __Agree __No Opinion __Disagree _Strongly Disagree | I have difficulty fitting in at school. |
| 7 | __Strongly Agree __Agree __No Opinion __Disagree _Strongly Disagree | School is a welcoming and friendly place. |


| 8 | __Strongly Agree __Agree __No Opinion __Sisagree _Strongly Disagree | I am proud of my school. |
| :---: | :---: | :---: |
| 9 | __Strongly Agree __Agree __No Opinion __Disagree _Strongly Disagree | I have been bullied at school. |
| 10 | __Strongly Agree __Agree __No Opinion __Disagree _Strongly Disagree | I know the goals my school is working on. |
| 11 | __Strongly Agree __Agree ___No Opinion ___ Disagree Strongly Disagree | I enjoy being at school. |
| 12 | __Strongly Agree __Agree __No Opinion __Disagree _Strongly Disagree | I have never been recognized for something positive at school. |
| 13 | ___Strongly Agree ___Agree ___No Opinion __Sisagree Strongly Disagree | School is boring. |
| 14 | __Strongly Agree __Agree __No Opinion __Sisagree _Strongly Disagree | At school, I am encouraged to be creative. |
| 15 | __Strongly Agree __Agree __No Opinion __Sisagree _Strongly Disagree | Teachers provide me with challenging assignments. |


| 16 | __Strongly Agree __Agree __No Opinion __Sisagree _Strongly Disagree | My teacher expects me to do my best. |
| :---: | :---: | :---: |
| 17 | __Strongly Agree __Agree __No Opinion __Disagree _Strongly Disagree | I use technology in my classes to help me learn. |
| 18 | __Strongly Agree __Agree __No Opinion __Sisagree _Strongly Disagree | My classes help me understand what is happening in my everyday life. |
| 19 | __Strongly Agree <br> __Agree <br> __No Opinion <br> __Disagree <br> Strongly Disagree | School is preparing me well for my future. |
| 20 | __Strongly Agree __Agree __No Opinion __Disagree _Strongly Disagree | Teachers care about me as an individual. |
| 21 | __Strongly Agree __Agree __No Opinion ___Sisagree _Strongly Disagree | Teachers care if I am absent from school. |
| 22 | __Strongly Agree __Agree __No Opinion __Disagree _Strongly Disagree | If I have a problem, I have a teacher with whom I can talk. |
| 23 | __Strongly Agree <br> __Agree <br> __No Opinion <br> __Sisagree <br> Strongly Disagree | I have a teacher who is a positive role model for me. |


| 24 | __Strongly Agree __Agree __No Opinion __Disagree _Strongly Disagree | Teachers enjoy working with students |
| :---: | :---: | :---: |
| 25 | __Strongly Agree __Agree __No Opinion __Sisagree _Strongly Disagree | Teachers make school an exciting place to learn. |
| 26 | __Strongly Agree __Agree __No Opinion __Disagree _Strongly Disagree | Teachers respect students. |
| 27 | __Strongly Agree <br> __Agree <br> __No Opinion <br> __Disagree <br> Strongly Disagree | Students respect teachers. |
| 28 | __Strongly Agree __Agree __No Opinion ___Sisagree Strongly Disagree | Students respect each other. |
| 29 | __Strongly Agree <br> __Agree <br> __No Opinion <br> __Disagree <br> Strongly Disagree | Safety is important at my school. |
| 30 | __Strongly Agree __Agree __No Opinion __Disagree _Strongly Disagree | I push myself to do better academically. |
| 31 | __Strongly Agree <br> __Agree <br> __No Opinion <br> __Stragree <br> Strongly Disagree | I put forth my best effort at school. |


| 32 | __Strongly Agree __Agree __No Opinion __Disagree _Strongly Disagree | I am excited to tell my friends when I get good grades. |
| :---: | :---: | :---: |
| 33 | __Strongly Agree __Agree __No Opinion __Sisagree _Strongly Disagree | I am afraid my friends will not like me if I do well in school. |
| 34 | __Strongly Agree __Agree __No Opinion __Disagree _Strongly Disagree | My parents care about my education. |
| 35 | __Strongly Agree __Agree __No Opinion __Disagree __Strongly Disagree | My parents think going to college is important. |
| 36 | __Strongly Agree __Agree ___No Opinion ___Sisagree Strongly Disagree | My parents feel comfortable talking to my teachers. |

## Appendix B

## Consent for a Minor to Participate

## UNIVERSITY OF NORTH CAROLINA AT GREENSBORO CONSENT FOR A MINOR TO PARTICIPATE

Project Title: Perceptions of Public School: Listening to the voices of the enrolled and those who have dropped out.

Project Director: Brad Rice

## Participant's Name:

$\qquad$
Who is conducting the study?
This study is being conducted by Brad Rice, a graduate student at the University of North Carolina at Greensboro, for the purpose of completing the requirements of a doctoral plan of study.
"Central North Carolina School District" is neither conducting nor sponsoring the project.
What is the study about?
Everyone has different experiences about when they are in school. The purpose of this study is to learn about the differences between the perceptions and experiences of students who stay in public high schools until they graduate and the perceptions and experiences of students who have made the decision to drop out of school. Every student who has been enrolled in Central North Carolina High School will take a survey about their school experience.

Why are you asking my child?
Your child is being asked to complete the survey because he or she was enrolled in Central North Carolina High School this school year.

## What will you ask my child to do if I agree to let him or her be in the study?

Your child will be asked to complete a survey. The survey contains 36 questions and should take between 10-30 minutes. You will then be asked to place the survey in the provided envelope and mail it back to me.

## Is there any audio/video recording of my child?

There will be no audio/video recording of your child.

## What are the dangers to my child?

The Institutional Review Board at the University of North Carolina at Greensboro has determined that participation in this study poses no risk to participants.

If you have any concerns about your child's rights or how you are being treated, please contact Eric Allen in the Office of Research and Compliance at UNCG at (336) 256-1482. Questions about this project or benefits or risks associated with being in this study can be answered by Brad Rice who may be contacted at (336) 625-5104, (336) 510-7852, or rice336@triad.rr.com.

Are there any benefits to my child as a result of participation in this research study?
The survey is completely anonymous. There are no direct benefits to your child if they complete the survey.

## Are there any benefits to society as a result of my child taking part in this research?

The survey results will be shared with the school system. The results may be used to make school better for students in the future.

Will my child get paid for being in the study? Will it cost me anything for my kid to be in this study?

The survey is completely anonymous. Your child will not be paid to complete the survey nor will it cost you anything for your child to complete the survey.

## How will my child's information be kept confidential?

All information obtained in this study is strictly confidential unless disclosure is required by law. Your child will be given a survey and an unmarked envelope. Your child will be asked to complete the survey anonymously. When the surveys are received they will be stored. Survey results will then be transferred into an electronic database without any way of identifying your child. The consent forms, database, and surveys will be kept for 3 years after completion of the project. The surveys and consent forms will be stored in a locked filing cabinet in my residence. Electronic data will be stored on a hard drive with password protection. At the end of three years, the electronic data will be deleted and the consent forms and all other paper from the project will be shredded.

## What if my child wants to leave the study or I want him/her to leave the study?

You have the right to refuse to allow your child to participate or to withdraw him or her at any time, without penalty. If your child does withdraw, it will not affect you or your child in any way. If you or your child chooses to withdraw, you may request that any data which has been collected be destroyed unless it is in a de-identifiable state.

## What about new information/changes in the study?

If significant new information relating to the study becomes available which may relate to your willingness allow your child to continue to participate, this information will be provided to you.

## Voluntary Consent by Participant:

By signing this consent form, you are agreeing that you have read it or it has been read to you. You fully understand the contents of this document and consent to your child taking part in this study. All of your questions concerning this study have been answered. By signing this form, you are agreeing that you are the legal parent or guardian of the child who wishes to participate in this study described to you by Brad Rice.
$\qquad$ Date:
Participant's Parent/Legal Guardian's Signature
$\qquad$ Date: $\qquad$
Participant's Parent/Legal Guardian’s Signature

## Appendix C

## Assent Form

Study Title: Perceptions of Public School: Listening to the voices of the enrolled and those who have dropped out.

My name is Brad Rice.

## Who is conducting the study?

This study is being conducted by Brad Rice, a graduate student at the University of North Carolina at Greensboro, for the purpose of completing the requirements of a doctoral plan of study.

Central North Carolina School District is not conducting nor sponsoring the project.

## What is this about?

Everyone has different experiences about when they are in school. I would like for you to complete a survey about your school experience.

I want to learn about the differences between the perceptions and experiences of students who stay in public high schools until they graduate and the perceptions and experiences of students who have made the decision to drop out of school.

## Did my parents say it was ok?

Your parent(s) said it was ok for you to be in this study and have signed a form like this one.
Why me?
We would like you to take part because you were enrolled at Central North Carolina High School this year.

## What if I want to stop?

You do not have to say "yes", if you do not want to take part. You will not be punished if you say "no". Even if you say "yes" now and change your mind after you start doing this study, you can stop and no one will be mad at you.

## What will I have to do?

You will be asked to complete a survey. The survey contains 36 questions and should take between 10-30 minutes. You will then be asked to place the survey in the provided envelope and mail it back to me.

## Will anything bad happen to me?

The survey is completely anonymous. Nothing bad will happen to you if you complete the survey.

## Will anything good happen to me?

The survey is completely anonymous. Nothing good will happen to you if you complete the survey. The survey results will be shared with the school system to try to make school better for the students.

## Do I get anything for being in this study?

The survey is completely anonymous. You will not be paid to complete the survey.

## What if I have questions?

You are free to ask questions at any time.
You may call me at (336) 625-5104 or (336) 510-7852.
If you understand this study and want to be in it, please write your name below.

## Appendix D

## Informed Consent for Participation in Research

## UNIVERSITY OF NORTH CAROLINA AT GREENSBORO INFORMED CONSENT FOR PARTICIPATION IN RESEARCH

Project Title: Perceptions of Public School: Listening to the voices of the enrolled and those who have dropped out.

Project Director: Brad Rice
Participant's Name: $\qquad$
Who is conducting the study?
This study is being conducted by Brad Rice, a graduate student at the University of North Carolina at Greensboro, for the purpose of completing the requirements of a doctoral plan of study.

Central North Carolina School District is neither conducting nor sponsoring the project.

## What is the study about?

Everyone has different experiences about when they are in school. The purpose of this study is to learn about the differences between the perceptions and experiences of students who stay in public high schools until they graduate and the perceptions and experiences of students who have made the decision to drop out of school. Every student who has been enrolled in Central North Carolina High School will take a survey about their school experience.

Why are you asking me?
You are being asked to complete the survey because you were enrolled in Central North Carolina High School this school year.

## What will you ask me to do if I agree to be in the study?

You will be asked to complete a survey. The survey contains 36 questions and should take between 10-30 minutes. You will then be asked to place the survey in the provided envelope and mail it back to me.

## Is there any audio/video recording?

There will be no audio/video recording of you.

## What are the dangers to me?

The Institutional Review Board at the University of North Carolina at Greensboro has determined that participation in this study poses no risk to participants.

If you have any concerns about your rights or how you are being treated, please contact Eric Allen in the Office of Research and Compliance at UNCG at (336) 256-1482. Questions about this project or benefits or risks associated with being in this study can be answered by Brad Rice who may be contacted at (336) 625-5104, (336) 510-7852, or rice336@triad.rr.com.

Are there any benefits to me for taking part in this research study?
The survey is completely anonymous. There are no direct benefits to you for completing the survey.

## Are there any benefits to society as a result of me taking part in this research?

The survey results will be shared with the school system. The results may be used to make school better for students in the future.

Will I get paid for being in the study? Will it cost me anything?
The survey is completely anonymous. You will not be paid to complete the survey nor will it cost you anything to complete the survey.

## How will you keep my information confidential?

All information obtained in this study is strictly confidential unless disclosure is required by law. Your child will be given a survey and an unmarked envelope. Your child will be asked to complete the survey anonymously. When the surveys are received they will be stored. Survey results will then be transferred into an electronic database without any way of identifying your child. The consent forms, database, and surveys will be kept for 3 years after completion of the project. The surveys and consent forms will be stored in a locked filing cabinet in my residence. Electronic data will be stored on a hard drive with password protection. At the end of three years, the electronic data will be deleted and the consent forms and all other paper from the project will be shredded.

## What if I want to leave the study?

You have the right to refuse to participate or to withdraw at any time, without penalty. If you do withdraw, it will not affect your in any way. If you choose to withdraw, you may request that any of your data which has been collected be destroyed unless it is in a de-identifiable state.

## What about new information/changes in the study?

If significant new information relating to the study becomes available which may relate to your willingness to continue to participate, this information will be provided to you.

## Voluntary Consent by Participant:

By signing this consent form you are agreeing that you read, or it has been read to you, and you fully understand the contents of this document and are openly willing consent to take part in this study. All of your questions concerning this study have been answered. By signing this form, you are agreeing that you are 18 years of age or older and are agreeing to participate, or have the individual specified above as a participant participate, in this study described to you by Brad Rice.

## Appendix E

## Sample Script

My name is Brad Rice and I am a graduate student at the University of North Carolina at Greensboro. I am working on a research project for the purpose of completing the requirements of a doctoral plan of study. Central North Carolina School District is neither conducting nor sponsoring the project.

You are being asked if want to be in the research study. I am trying to find out about the differences between the perceptions and experiences of students who stay in public high schools until they graduate and the perceptions and experiences of students who have made the decision to drop out of school. Every student who has been enrolled in Central North Carolina High School this year will be asked to take a survey about their school experience.

I am here today to ask you to take the same survey because you were enrolled in Central North Carolina High School this school year.

This discussion and the piece of paper given to you will tell you about the study to help you decide if you want to be part of the study

You will be asked to complete a survey. The survey contains 36 questions and should take between 10-30 minutes. You will then be asked to place the survey in the provided envelope and mail it back to me.
"There are no payments made for participating in this study"
You will not be audio/video recorded throughout the course of this study.
Although you will not receive any direct benefits as the result of completing the survey, the survey results will be shared with the school system. The results may be used to make school better for students in the future.

The Institutional Review Board at the University of North Carolina at Greensboro has determined that your participation in this study poses no risk to you.

All information obtained in this study is strictly confidential unless disclosure is required by law. You will be given a survey and an unmarked envelope. You will be asked to complete the survey anonymously. When the surveys are received they will be stored. Survey results will then be transferred into an electronic database without any way of identifying you. The consent forms, database, and surveys will be kept for 3 years after completion of the project. The surveys and consent forms will be stored in a locked filing cabinet in my residence. Electronic data will be stored on a hard drive with password protection. At the end of three years, the electronic data will be deleted and the consent forms and all other paper from the project will be shredded.

You should ask any questions you have before making up your mind. You can think about it and talk to your family or friends before you decide if you want to be in the study.

If you decide you want to be in the study you will need to sign the piece of paper given to you earlier.

If you decide you do not want to be in the study later you are free to leave whenever you like without penalty or unfair treatment.

## Appendix F

## Means \& Standard Deviations

Question 5: "I feel accepted for who I am at school"

Group Statistics

|  | Status | N | Mean | Std. Deviation |
| :--- | :--- | :--- | :--- | :--- |
| Std. Error Mean |  |  |  |  |
| 5. I feel accepted for who I am at school. 2 | 991 | 3.90 | 1.177 | .037 |
|  | 1 | 41 | 3.32 | 1.254 |



Question 6: "I have difficulty fitting in at school."

Group Statistics

|  | Status | N | Mean | Std. Deviation |
| :--- | :--- | :--- | :--- | :--- |
| Std. Error Mean |  |  |  |  |
| 6. I have difficulty fitting in at school. 2 | 991 | 2.15 | 1.189 | .038 |
| 1 | 41 | 2.51 | 1.207 | .188 |



Question 7: "School is a welcoming and friendly place."

Group Statistics




Question 8: "I am proud of my school."

Group Statistics

| Status | $N$ | Mean | Std. Deviation | Std. Error Mean |
| ---: | :--- | :--- | :--- | :--- |
| 8. I am proud of my school. 2 | 991 | 3.50 | 1.188 | .038 |
| 1 | 41 | 3.12 | 1.144 | .179 |




Question 9: "I have been bullied at school."

## Group Statistics

|  | Status | N | Mean | Std. Deviation | Std. Error Mean |
| :--- | :--- | :--- | :--- | :--- | :--- |
| 9. I have been bullied at <br> school. | 2 | $0^{\mathrm{a}}$ | . | . | . |

a. $t$ cannot be computed because at least one of the groups is empty.


Question 10: "I know the goals my school is working on."

Group Statistics

|  | Status | N | Mean | Std. Deviation | Std. Error Mean |
| :--- | :--- | :--- | :--- | :--- | :--- |
| 10. I know the goals my  <br> school is working on. 2 <br> $\mathrm{o}^{\mathrm{a}}$ . <br> . . l | 40 | 2.73 | 1.240 | .196 |  |

a. $t$ cannot be computed because at least one of the groups is empty.


Question 11: "I enjoy being at school."

Group Statistics

| Status | N | Mean | Std. Deviation | Std. Error Mean |
| ---: | :--- | :--- | :--- | :--- |
| 11. I enjoy being at school. 2 | 991 | 3.28 | 1.243 | .039 |
| 1 | 41 | 3.15 | 1.315 | .205 |




Question 12: "I have never been recognized for something positive at school."

Group Statistics




Question 13: "School is boring."

Group Statistics

|  | Status | $N$ | Mean | Std. Deviation |
| :---: | :---: | :---: | :--- | :--- |
| Std. Error Mean |  |  |  |  |
| 13. School is boring. 2 | 991 | 3.12 | 1.206 | .038 |
| 1 | 41 | 3.17 | 1.283 | .200 |




Question 14: "At school I am encouraged to be creative."

Group Statistics

| Status | $N$ | Mean | Std. Deviation | Std. Error Mean |
| ---: | :--- | :--- | :--- | :--- |
| 14. At school I am encouraged to be creative. 2 | 991 | 3.50 | 1.166 | .037 |
| 1 | 41 | 3.20 | 1.145 | .179 |




Question 15: "Teachers provide me with challenging assignments."

Group Statistics




Question 16: "My teacher expects me to do my best."

Group Statistics

| Status | $N$ | Mean | Std. Deviation | Std. Error Mean |
| ---: | :--- | :--- | :--- | :--- |
| 16. My teacher expects me to do my best. 2 | 991 | 4.10 | 1.082 | .034 |
| 1 | 41 | 3.61 | 1.070 | .167 |




Question 17: "I use technology in my classes to help me learn."

Group Statistics




Question 18: "My classes help me understand what is happening in my everyday life."

Group Statistics

| Status | $N$ | Mean | Std. Deviation | Std. Error Mean |
| :--- | :--- | :--- | :--- | :--- |
| 18. My classes help me understand what is happening in my everyday life. 2 | 991 | 3.39 | 1.200 | .038 |
| 1 | 41 | 3.10 | 1.221 | .191 |




Question 19: "School is preparing me well for my future."

Group Statistics




Question 20: "Teachers care about me as an individual."

Group Statistics

| Status | N | Mean | Std. Deviation | Std. Error Mean |
| :--- | :--- | :--- | :--- | :--- |
| 20. Teachers care about me as an individual. 2 | 991 | 3.47 | 1.178 | .037 |
| 1 | 40 | 3.18 | 1.238 | .196 |




Question 21: "TEACHERS care if I am absent from school."

Group Statistics

| Status | $N$ | Mean | Std. Deviation | Std. Error Mean |
| ---: | ---: | :--- | :--- | :--- |
| 21. Teachers care if I am absent from school. 2 | 991 | 3.30 | 1.233 | .039 |
| 1 | 40 | 3.28 | 1.281 | .203 |




Question 22: "If I have a problem, I have a teacher with whom I can talk."

Group Statistics




Question 23: "I have a teacher who is a positive role model for me."

Group Statistics




Question 24: "Teachers enjoy working with students."

Group Statistics

| Status | N | Mean | Std. Deviation | Std. Error Mean |
| ---: | :--- | :--- | :--- | :--- |
| 24. Teachers enjoy working with students. 2 | 991 | 3.60 | 1.062 | .034 |
| 1 | 40 | 3.18 | 1.130 | .179 |




Question 25: "Teachers make school an exciting place to learn."

Group Statistics

| Status | $N$ | Mean | Std. Deviation | Std. Error Mean |
| ---: | :--- | :--- | :--- | :--- |
| 25. Teachers make school an exciting place to learn. 2 | 991 | 3.20 | 1.166 | .037 |
| 1 | 40 | 2.88 | 1.114 | .176 |




Question 26: "Teachers respect students."

Group Statistics

| Status | N | Mean | Std. Deviation | Std. Error Mean |
| :---: | :---: | :--- | :--- | :--- |
| 26. Teachers respect students. 2 | 991 | 3.44 | 1.163 | .037 |
| 1 | 40 | 3.08 | 1.228 | .194 |




Question 27: "Students respect teachers."

Group Statistics

| Status | $N$ | Mean | Std. Deviation | Std. Error Mean |
| ---: | :---: | :--- | :--- | :--- |
| 27. Students respect teachers. 2 | 991 | 2.78 | 1.167 | .037 |
| 1 | 40 | 2.93 | 1.095 | .173 |




Question 28: "Students respect each other."

Group Statistics

|  | Status | $N$ | Mean | Std. Deviation |
| :--- | :--- | :--- | :--- | :--- |
| Std. Error Mean |  |  |  |  |
| 28. Students respect each other. 2 | 991 | 2.62 | 1.172 | .037 |
| 1 | 41 | 2.85 | 1.131 | .177 |




Question 29: "Safety is important at my school."

Group Statistics

|  | Status | N | Mean | Std. Deviation |
| :--- | :--- | :--- | :--- | :--- |
| Std. Error Mean |  |  |  |  |
| 29. Safety is important at my school. 2 | 991 | 3.69 | 1.116 | .035 |
| 1 | 41 | 3.59 | .974 | .152 |




Question 30: "I push myself to do better academically."

Group Statistics




Question 31: "I put forth my best effort at school."

Group Statistics

|  | Status | N | Mean | Std. Deviation |
| :--- | :--- | :--- | :--- | :--- |
| Std. Error Mean |  |  |  |  |
| 31. I put forth my best effort at school. 2 | 991 | 3.88 | 1.081 | .034 |
| 1 | 41 | 3.34 | 1.132 | .177 |




Question 32: "I am excited to tell my friends when I get good grades."

Group Statistics




Question 33: "I am afraid my friends won't like me if I do well in school."

Group Statistics



Question 34: "My parents care about my education."

Group Statistics

| Status | N | Mean | Std. Deviation | Std. Error Mean |
| ---: | :--- | :--- | :--- | :--- |
| 34. My parents care about my education. 2 | 991 | 4.46 | 1.028 | .033 |
| 1 | 41 | 4.17 | 1.070 | .167 |




Question 35: "My parents think going to college is important."

Group Statistics

|  | Status | $N$ | Mean | Std. Deviation |
| :--- | :--- | :--- | :--- | :--- |
| Std. Error Mean |  |  |  |  |
| 35. My parents think going to college is important. 2 | 991 | 4.46 | 1.011 | .032 |
| 1 | 41 | 4.02 | 1.012 | .158 |




Question 36: "My parents feel comfortable talking to my teachers."

Group Statistics

|  | Status | N | Mean | Std. Deviation | Std. Error <br> Mean |
| :--- | :--- | :--- | :--- | :--- | :--- |
| 36. My parents feel 2 991 3.84 1.152 <br> comfortable talking to my <br> teachers. 1 41 3.61 1.070 | .037 |  |  |  |  |



## Appendix G

## Chi-Square Test



Question 5: "I feel accepted for who I am at school"

| Observed | Strongly Agree | Agree | Neutral | Disagree | Strongly Disagree | $\begin{gathered} \text { Total } \\ 41 \\ 991 \\ 1032 \end{gathered}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Dropouts | 3 | 24 | 4 | 3 | 7 |  |
| Enrolled | 350 | 406 | 98 | 60 | 77 |  |
|  | 353 | 430 | 102 | 63 | 84 |  |
| Expected | Strongly Agree | Agree | Neutral | Disagree | Strongly Disagree |  |
| Dropouts | 14.024 | 17.083 | 4.052 | 2.503 | 3.337 |  |
| Enrolled | 338.976 | 412.917 | 97.948 | 60.497 | 80.663 |  |


| Table | Observed | Expected | Observed-Expected | (O-E)*(O-E)/E |
| :---: | :---: | :---: | :---: | :---: |
| Dropout SA | 3 | 14.024 | -11.024 | 8.666 |
| Dropout A | 24 | 17.083 | 6.917 | 2.800 |
| Dropout N | 4 | 4.052 | -0.052 | 0.001 |
| Dropout D | 3 | 2.503 | 0.497 | 0.099 |
| Dropout SD | 7 | 3.337 | 3.663 | 4.020 |
| Enrolled SA | 350 | 338.976 | 11.024 | 0.359 |
| Enrolled A | 406 | 412.917 | -6.917 | 0.116 |
| Enrolled N | 98 | 97.948 | 0.052 | 0.000 |
| Enrolled D | 60 | 60.497 | -0.497 | 0.004 |
| Enrolled SD | 77 | 80.663 | -3.663 | 0.166 |
|  |  |  | Chi-square $=16.231$ |  |
|  |  |  | DF= 4 |  |
|  |  |  | Alpha $($ critical value $)=9.49$ |  |
|  |  |  | Cumulative Probability $=0.997$ |  |
|  |  |  | P-Value | 0.002724668 |

Question 6: "I have difficulty fitting in at school."

| Observed | Strongly Agree | Agree | Neutral | Disagree Stro | Strongly Disagree | $\begin{gathered} \text { Total } \\ 41 \\ 991 \end{gathered}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Dropouts | 3 | 8 | 3 | 20 | 7 |  |
| Enrolled | 63 | 92 | 134 | 348 | 354 |  |
|  | 66 | 100 | 137 | 368 | 361 | 1032 |
| Expected | Strongly Agree | Agr |  | Neutral | Disagree | Strongly Disagree |
| Dropouts | 2.622093023 | 3.97 | 2868217 | 5.442829457 | 14.62015504 | 14.34205426 |
| Enrolled | 63.37790698 | 96.02 | 2713178 | 131.5571705 | 353.379845 | 346.6579457 |



Question 7: "School is a welcoming and friendly place."

| Observed | Strongly Agree | Agree | Neutral | Disagree | Strongly Disagree | Total |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Dropouts <br> Enrolled | 4 | 18 | 7 | 7 | 5 | $\begin{aligned} & 41 \\ & 991 \\ & 1032 \end{aligned}$ |
|  | 131 | 407 | 234 | 111 | 108 |  |
|  | 135 | 425 | 241 | 118 | 113 |  |
| Expected | Strongly Agree | Agree | Neutral | Disagree | Strongly Disagree |  |
| Dropouts | 5.363372093 | 16.88468992 | 9.574612403 | 4.687984496 | 4.489341085 |  |
| Enrolled | 129.6366279 | 408.1153101 | 231.4253876 | 113.3120155 | 108.5106589 |  |


| Table | Observed | Expected | Observed-Expected | $(\mathrm{O}-\mathrm{E})^{\star}(\mathrm{O}-\mathrm{E}) / \mathrm{E}$ |
| :--- | :---: | :---: | :---: | :---: |
| Dropout SA | 4 | 5.36337209 | -1.363372093 | 0.346569925 |
| Dropout A | 18 | 16.8846899 | 1.115310078 | 0.073671271 |
| Dropout N | 7 | 9.57461240 | -2.574612403 | 0.692313041 |
| Dropout D | 7 | 4.68798449 | 2.312015504 | 1.140237493 |
| Dropout SD | 5 | 4.48934108 | 0.510658915 | 0.058087038 |
| Enrolled SA | 131 | 129.636627 | 1.363372093 | 0.014338413 |
| Enrolled A | 407 | 408.115310 | -1.115310078 | 0.003047954 |
| Enrolled N | 234 | 231.425387 | 2.574612403 | 0.028642618 |
| Enrolled D | 111 | 113.312015 | -2.312015504 | 0.047174306 |
| Enrolled SD | 108 | 108.510658 | -0.510658915 | 0.002403197 |
|  | Chi-square $=$ |  |  | 2.406485256 |
|  |  | DF $=$ | 4 |  |
|  |  | Alpha (critical value) $=9.49$ |  |  |
|  |  | Cumulative Probability $=$ | 0.34 |  |
|  |  | P-Value | 0.661455598 |  |

Question 8; "I am proud of my school."

| Observed | Strongly Agree |  | Agree |  | Neutral | Disagree |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: | Strongly Disagree Total


| Expected | Strongly Agree | Agree | Neutral | Disagree | Strongly Disagree |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Dropouts | 8.025193798 | 15.25581395 | 10.36918605 | 3.138565891 | 4.21124031 |
| Enrolled | 193.9748062 | 368.744186 | 250.630814 | 75.86143411 | 101.7887597 |


| Table | Observed | Expected | Observed-Expected | (O-E)*(O-E)/E |
| :---: | :---: | :---: | :---: | :---: |
| Dropout SA | 2 | 8.02519379 | -6.025193798 | 4.523624129 |
| Dropout A | 18 | 15.2558139 | 2.744186047 | 0.493618832 |
| Dropout N | 9 | 10.3691860 | -1.369186047 | 0.180792438 |
| Dropout D | 7 | 3.13856589 | 3.861434109 | 4.750791887 |
| Dropout SD | 5 | 4.21124031 | 0.78875969 | 0.147733637 |
| Enrolled SA | 200 | 193.974806 | 6.025193798 | 0.187152966 |
| Enrolled A | 366 | 368.744186 | -2.744186047 | 0.020422172 |
| Enrolled N | 252 | 250.630814 | 1.369186047 | 0.007479808 |
| Enrolled D | 72 | 75.8614341 | -3.861434109 | 0.19655143 |
| Enrolled SD | 101 | 101.788759 | -0.78875969 | 0.006112088 |
|  |  |  | Chi-square $=10.51427939$ |  |
|  |  |  | $D F=4$ |  |
|  |  |  | Alpha (critical value) $=9.49$ |  |
|  |  |  | Cumulative Probability $=0.97$ |  |
|  |  |  | P -Value | 0.032600863 |

Question 9: "I have been bullied at school."
No Data

Question 10: "I know the goals my school is working on."
No Data
Question 11: "I enjoy being at school."

| Observed | Strongly Agree | Agree | Neutral | Disagree | Strongly Disagree | Total <br> 41 <br> 991 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Dropouts | 5 | 17 | 4 | 9 | 6 |  |
| Enrolled | 138 | 393 | 199 | 128 | 133 |  |
|  | 143 | 410 | 203 | 137 | 139 | 1032 |


| Expected | Strongly Agree | Agree | Neutral | Disagree | Strongly Disagree |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Dropouts | 5.68120155 | 16.28875969 | 8.064922481 | 5.442829457 | 5.522286822 |
| Enrolled | 137.3187984 | 393.7112403 | 194.9350775 | 131.5571705 | 133.4777132 |


| Table | Observed | Expected | Observed-Expected | (O-E)*(O-E)/E |
| :---: | :---: | :---: | :---: | :---: |
| Dropout SA | 5 | 5.68120155 | -0.68120155 | 0.081679122 |
| Dropout A | 17 | 16.2887596 | 0.71124031 | 0.031055942 |
| Dropout N | 4 | 8.06492248 | -4.064922481 | 2.048822517 |
| Dropout D | 9 | 5.44282945 | 3.557170543 | 2.324794919 |
| Dropout SD | 6 | 5.52228682 | 0.477713178 | 0.041325249 |
| Enrolled SA | 138 | 137.318798 | 0.68120155 | 0.003379257 |
| Enrolled A | 393 | 393.711240 | -0.71124031 | 0.001284857 |
| Enrolled N | 199 | 194.935077 | 4.064922481 | 0.084764605 |
| Enrolled D | 128 | 131.557170 | -3.557170543 | 0.096182232 |
| Enrolled SD | 133 | 133.477713 | -0.477713178 | 0.001709723 |
|  |  |  | Chi-square $=4.714998423$ |  |
|  |  |  | $D F=4$ |  |
|  |  |  | Alpha (critical value) $=9.49$ |  |
|  |  |  | Cumulative Probability $=0.68$ |  |
|  |  |  | P-Value | 0.317809607 |

Question 12: "I have never been recognized for something positive at school."

| Observed | Strongly Agree |  | Agree |  | Neutral | Disagree |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: |
| Strongly Disagree | Total |  |  |  |  |  |
|  | Dropouts |  |  |  |  |  |
| Enrolled | 7 | 11 | 6 | 10 | 6 | $\mathbf{4 0}$ |
|  | 111 | 90 | 205 | 367 | 218 | $\mathbf{9 9 1}$ |
|  | $\mathbf{1 1 8}$ | $\mathbf{1 0 1}$ | $\mathbf{2 1 1}$ | $\mathbf{3 7 7}$ | $\mathbf{2 2 4}$ | $\mathbf{1 0 3 1}$ |


| Expected | Strongly Agree | Agree | Neutral | Disagree | Strongly Disagree |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Dropouts | 4.578079534 | 3.918525703 | 8.186226964 | 14.62657614 | 8.690591659 |
| Enrolled | 113.4219205 | 97.0814743 | 202.813773 | 362.3734239 | 215.3094083 |



Question 13: "School is boring."

| Observed | Strongly Agree | Agree | Neutral | Disagree | Strongly Disagree | $\begin{gathered} \text { Total } \\ 41 \\ 991 \\ 1032 \end{gathered}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Dropouts | 7 | 12 | 7 | 11 | 4 |  |
| Enrolled | 174 | 199 | 251 | 303 | 64 |  |
|  | 181 | 211 | 258 | 314 | 68 |  |


|  | Expected | Strongly Agree | Agree | Neutral | Disagree |
| :--- | :---: | :---: | :---: | :---: | :---: |
| Strongly Disagree |  |  |  |  |  |
| Dropouts | 7.190891473 | 8.382751938 | 10.25 | 12.4748062 | 2.701550388 |
| Enrolled | 173.8091085 | 202.6172481 | 247.75 | 301.5251938 | 65.29844961 |
|  |  |  |  |  |  |


| Table | Observed | Expected | Observed-Expected | (O-E)*(O-E)/E |
| :---: | :---: | :---: | :---: | :---: |
| Dropout SA | 7 | 7.19089147 | -0.190891473 | 0.00506746 |
| Dropout A | 12 | 8.38275193 | 3.617248062 | 1.560881634 |
| Dropout N | 7 | 10.25 | -3.25 | 1.030487805 |
| Dropout D | 11 | 12.4748062 | -1.474806202 | 0.174355681 |
| Dropout SD | 4 | 2.70155038 | 1.298449612 | 0.624075495 |
| Enrolled SA | 174 | 173.809108 | 0.190891473 | 0.000209653 |
| Enrolled A | 199 | 202.617248 | -3.617248062 | 0.064577343 |
| Enrolled N | 251 | 247.75 | 3.25 | 0.042633703 |
| Enrolled D | 303 | 301.525193 | 1.474806202 | 0.007213504 |
| Enrolled SD | 64 | 65.2984496 | -1.298449612 | 0.025819471 |
|  |  |  | Chi-square $=3.535321749$ |  |
|  |  |  | DF= 4 |  |
|  |  |  | Alpha $($ critical value $)=9.49$ |  |
|  |  |  | Cumulative Probability $=0.53$ |  |
|  |  |  | P-Value | 0.472527966 |

Question 14: "At school I am encouraged to be creative."

| Observed | Strongly Agree |  | Agree |  | Neutral |  |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: | Disagree | Strongly Disagree |
| :---: | Total


|  | Expected | Strongly Agree | Agree | Neutral | Disagree |  | Strongly Disagree |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Dropouts | 7.111434109 | 17.95736434 | 7.468992248 | 4.886627907 | 3.575581395 |  |  |
| Enrolled | 171.8885659 | 434.0426357 | 180.5310078 | 118.1133721 | 86.4244186 |  |  |
|  |  |  |  |  |  |  |  |


| Table | Observed | Expected | Observed-Expected | (O-E)* $(O-E) / E$ |
| :---: | :---: | :---: | :---: | :---: |
| Dropout SA | 3 | 7.11143410 | -4.111434109 | 2.377001625 |
| Dropout A | 18 | 17.9573643 | 0.042635659 | 0.000101229 |
| Dropout N | 8 | 7.46899224 | 0.531007752 | 0.037751978 |
| Dropout D | 8 | 4.88662790 | 3.113372093 | 1.983593999 |
| Dropout SD | 4 | 3.57558139 | 0.424418605 | 0.050378143 |
| Enrolled SA | 176 | 171.888565 | 4.111434109 | 0.098342146 |
| Enrolled A | 434 | 434.042635 | -0.042635659 | $4.18807 \mathrm{E}-06$ |
| Enrolled N | 180 | 180.531007 | -0.531007752 | 0.001561888 |
| Enrolled D | 115 | 118.113372 | -3.113372093 | 0.082065947 |
| Enrolled SD | 86 | 86.4244186 | -0.424418605 | 0.002084262 |
|  |  |  | Chi-square $=4.632885405$ |  |
|  |  |  | $D F=4$ |  |
|  |  |  | Alpha (critical value) $=9.49$ |  |
|  |  |  | Cumulative Probability $=0.67$ |  |
|  |  |  | P-Value | 0.32708017 |

Question 15: "Teachers provide me with challenging assignments."

| Observed | Strongly Agree |  | Agree |  | Neutral |  |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: | Disagree | Strongly Disagree |
| :---: | Total


| Expected | Strongly Agree | Agree | Neutral | Disagree | Strongly Disagree |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Dropouts | 12.15697674 | 18.19573643 | 5.204457364 | 2.582364341 | 2.860465116 |
| Enrolled | 293.8430233 | 439.8042636 | 125.7955426 | 62.41763566 | 69.13953488 |



Question 16: "My teacher expects me to do my best."

| Observed | Strongly Agree | Agree | Neutral | Disagree | Strongly Disagree | $\begin{gathered} \text { Total } \\ 41 \\ 991 \\ 1032 \end{gathered}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Dropouts | 5 | 25 | 4 | 4 | 3 |  |
| Enrolled | 440 | 351 | 117 | 27 | 56 |  |
|  | 445 | 376 | 121 | 31 | 59 |  |


| Expected | Strongly Agree | Agree | Neutral | Disagree | Strongly Disagree |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Dropouts | 17.67926357 | 14.9379845 | 4.807170543 | 1.231589147 | 2.343992248 |
| Enrolled | 427.3207364 | 361.0620155 | 116.1928295 | 29.76841085 | 56.65600775 |


| Table | Observed | Expected | Observed-Expected | (O-E)*(O-E)/E |
| :---: | :---: | :---: | :---: | :---: |
| Dropout SA | 5 | 17.6792635 | -12.67926357 | 9.093349617 |
| Dropout A | 25 | 14.9379845 | 10.0620155 | 6.777631616 |
| Dropout N | 4 | 4.80717054 | -0.807170543 | 0.13553176 |
| Dropout D | 4 | 1.23158914 | 2.768410853 | 6.222934545 |
| Dropout SD | 3 | 2.34399224 | 0.656007752 | 0.18359539 |
| Enrolled SA | 440 | 427.320736 | 12.67926357 | 0.376213254 |
| Enrolled A | 351 | 361.062015 | -10.0620155 | 0.280406555 |
| Enrolled N | 117 | 116.192829 | 0.807170543 | 0.005607268 |
| Enrolled D | 27 | 29.7684108 | -2.768410853 | 0.257457433 |
| Enrolled SD | 56 | 56.6560077 | -0.656007752 | 0.007595773 |
|  |  |  | Chi-square $=23.34032321$ |  |
|  |  |  | DF= 4 |  |
|  |  |  | Alpha (critical value) $=9.49$ |  |
|  |  |  | Cumulative Probability $=0.9999$ |  |
|  |  |  | P -Value | 0.000108267 |

Question 17: "I use technology in my classes to help me learn."

| Observed | Strongly Agree | Agree | Neutral | Disagree | Strongly Disagre | Total 40 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Dropouts | 5 | 16 | 5 | 13 | 1 |  |
| Enrolled | 300 | 471 | 97 | 61 | 62 | 99 |
|  | 305 | 487 | 102 | 74 | 63 | 1031 |
| Expected | Strongly Agree | Agree |  | Neutral | Disagree | Strongly Disagree |
| Dropouts | 11.83317168 | 18.894 | 7774 | 3.957322987 | 2.87099903 | 2.444228904 |
| Enrolled | 293.1668283 | 468.105 | 7226 | 98.04267701 | 71.12900097 | 60.5557711 |



Question 18: "My classes help me understand what is happening in my everyday life."

| Observed | Strongly Agree |  | Agree |  | Neutral | Disagree |  | Strongly Disagree | Total |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Dropouts | 3 | 17 | 8 | 7 | 6 |  |  |  |
| $\mathbf{4 y}$ |  |  |  |  |  |  |  |  |  |
|  | $\mathbf{4 1}$ |  |  |  |  |  |  |  |  |
| Enrolled | 150 | 428 | 183 | 123 | 107 | $\mathbf{9 9 1}$ |  |  |  |
|  | $\mathbf{1 5 3}$ | $\mathbf{4 4 5}$ | $\mathbf{1 9 1}$ | $\mathbf{1 3 0}$ | $\mathbf{1 1 3}$ | $\mathbf{1 0 3 2}$ |  |  |  |


| Expected | Strongly Agree | Agree | Neutral | Disagree | Strongly Disagree |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Dropouts | 6.078488372 | 17.67926357 | 7.588178295 | 5.164728682 | 4.489341085 |
| Enrolled | 146.9215116 | 427.3207364 | 183.4118217 | 124.8352713 | 108.5106589 |


| Table | Observed | Expected | Observed-Expected | (O-E)* (O-E)/E |
| :---: | :---: | :---: | :---: | :---: |
| Dropout SA | 3 | 6.07848837 | -3.078488372 | 1.559119649 |
| Dropout A | 17 | 17.6792635 | -0.679263566 | 0.026098315 |
| Dropout N | 8 | 7.58817829 | 0.411821705 | 0.022350176 |
| Dropout D | 7 | 5.16472868 | 1.835271318 | 0.652158326 |
| Dropout SD | 6 | 4.48934108 | 1.510658915 | 0.508335258 |
| Enrolled SA | 150 | 146.921511 | 3.078488372 | 0.064504446 |
| Enrolled A | 428 | 427.320736 | 0.679263566 | 0.001079749 |
| Enrolled N | 183 | 183.411821 | -0.411821705 | 0.000924679 |
| Enrolled D | 123 | 124.835271 | -1.835271318 | 0.026981323 |
| Enrolled SD | 107 | 108.510658 | -1.510658915 | 0.021031025 |
|  |  |  | Chi-square $=2.882582945$ |  |
|  |  |  | DF= 4 |  |
|  |  |  | Alpha (critical value) $=9.49$ |  |
|  |  |  | Cumulative Probability $=0.42$ |  |
|  |  |  | P-Value | 0.577663204 |

Question 19: "School is preparing me well for my future."

| Observed | Strongly Agree | Agree | Neutral | Disagree | Strongly Disagree | Total <br> 40 <br> 991 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Dropouts | 4 | 16 | 7 | 6 | 7 |  |
| Enrolled | 330 | 409 | 134 | 54 | 64 |  |
|  | 334 | 425 | 141 | 60 | 71 | 1031 |


| Expected | Strongly Agree |  | Agree | Neutral | Disagree |  | Strongly Disagree |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Dropouts | 12.95829292 | 16.48884578 | 5.470417071 | 2.327837051 | 2.754607177 |  |  |
| Enrolled | 321.0417071 | 408.5111542 | 135.5295829 | 57.67216295 | 68.24539282 |  |  |
|  |  |  |  |  |  |  |  |


| Table | Observed | Expected | Observed-Expected | (O-E)* (O-E)/E |
| :---: | :---: | :---: | :---: | :---: |
| Dropout SA | 4 | 12.9582929 | -8.958292919 | 6.193023458 |
| Dropout A | 16 | 16.4888457 | -0.488845781 | 0.01449284 |
| Dropout N | 7 | 5.47041707 | 1.529582929 | 0.427686574 |
| Dropout D | 6 | 2.32783705 | 3.672162949 | 5.792837051 |
| Dropout SD | 7 | 2.75460717 | 4.245392823 | 6.542987459 |
| Enrolled SA | 330 | 321.041707 | 8.958292919 | 0.249970674 |
| Enrolled A | 409 | 408.511154 | 0.488845781 | 0.000584978 |
| Enrolled N | 134 | 135.529582 | -1.529582929 | 0.017262828 |
| Enrolled D | 54 | 57.6721629 | -3.672162949 | 0.233817843 |
| Enrolled SD | 64 | 68.2453928 | -4.245392823 | 0.264096366 |
|  |  |  | Chi-square $=19.73676007$ |  |
|  |  |  | $D F=4$ |  |
|  |  |  | Alpha (critical value) $=9.49$ |  |
|  |  |  | Cumulative Probability $=0.9994$ |  |
|  |  |  | P-Value | 0.000562836 |

Question 20: "Teachers care about me as an individual."

| Observed | Strongly Agree | Agree | Neutral | Disagree | Strongly Disagree | $\begin{gathered} \text { Total } \\ 40 \\ 991 \end{gathered}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Dropouts | 5 | 15 | 6 | 10 | 4 |  |
| Enrolled | 170 | 418 | 209 | 94 | 100 |  |
|  | 175 | 433 | 215 | 104 | 104 | 1031 |


| Expected | Strongly Agre | Agree | Neutral | Disagree | e |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Dropouts | 6.789524733 | 16.79922405 | 8.341416101 | 4.034917556 | 4.034917556 |
| Enrolled | 168.2104753 | 416.2007759 | 206.6585839 | 99.96508244 | 99.96508244 |


| Table | Observed | Expected | Observed-Expected | (O-E)*(O-E)/E |
| :---: | :---: | :---: | :---: | :---: |
| Dropout SA | 5 | 6.78952473 | -1.789524733 | 0.47166759 |
| Dropout A | 15 | 16.7992240 | -1.799224054 | 0.192699805 |
| Dropout N | 6 | 8.34141610 | -2.341416101 | 0.657230054 |
| Dropout D | 10 | 4.03491755 | 5.965082444 | 8.818571402 |
| Dropout SD | 4 | 4.03491755 | -0.034917556 | 0.000302171 |
| Enrolled SA | 170 | 168.210475 | 1.789524733 | 0.019038046 |
| Enrolled A | 418 | 416.200775 | 1.799224054 | 0.007777994 |
| Enrolled N | 209 | 206.658583 | 2.341416101 | 0.026527954 |
| Enrolled D | 94 | 99.9650824 | -5.965082444 | 0.355946373 |
| Enrolled SD | 100 | 99.9650824 | 0.034917556 | $1.21966 \mathrm{E}-05$ |
|  |  |  | Chi-square $=10.54977359$ |  |
|  |  |  | DF= 4 |  |
|  |  |  | Alpha (critical value) $=9.49$ |  |
|  |  |  | Cumulative Probability $=0.97$ |  |
|  |  |  | P-Value | 0.032118235 |

Question 21: "Teachers care if I am absent from school."

| Observed | Strongly Agree | Agree | Neutral | Disagree | Strongly Disagree | Total <br> 40 <br> 991 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Dropouts | 5 | 18 | 6 | 5 | 6 |  |
| Enrolled | 168 | 327 | 243 | 139 | 114 |  |
|  | 173 | 345 | 249 | 144 | 120 | 1031 |


| Expected | Strongly Agree | Agree | Neutral | Disagree | Strongly Disagree |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Dropouts | 6.711930165 | 13.38506305 | 9.660523763 | 5.586808923 | 4.655674103 |
| Enrolled | 166.2880698 | 331.614937 | 239.3394762 | 138.4131911 | 115.3443259 |


| Table | Observed | Expected | Observed-Expected | $(\mathrm{O}-\mathrm{E})^{*}(\mathrm{O}-\mathrm{E}) / \mathrm{E}$ |
| :---: | :---: | :---: | :---: | :---: |
| Dropout SA | 5 | 6.71193016 | -1.711930165 | 0.436641148 |
| Dropout A | 18 | 13.3850630 | 4.614936954 | 1.591150002 |
| Dropout N | 6 | 9.66052376 | -3.660523763 | 1.387029787 |
| Dropout D | 5 | 5.58680892 | -0.586808923 | 0.061635312 |
| Dropout SD | 6 | 4.65567410 | 1.344325897 | 0.388174103 |
| Enrolled SA | 168 | 166.288069 | 1.711930165 | 0.017624264 |
| Enrolled A | 327 | 331.614937 | -4.614936954 | 0.064224016 |
| Enrolled N | 243 | 239.339476 | 3.660523763 | 0.055985057 |
| Enrolled D | 139 | 138.413191 | 0.586808923 | 0.002487803 |
| Enrolled SD | 114 | 115.344325 | -1.344325897 | 0.015667976 |
|  |  |  | Chi-square $=4.020619468$ |  |
|  |  |  | $D F=4$ |  |
|  |  |  | Alpha (critical value) $=9.49$ |  |
|  |  |  | Cumulative Probability $=0.6$ |  |
|  |  |  | P -Value | 0.403222501 |

Question 22: "If I have a problem, I have a teacher with whom I can talk."

| Observed | Strongly Agree |  | Agree |  | Neutral | Disagree |  | Strongly Disagree | Total |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Dropouts |  |  |  |  |  |  |  |  |
| Enrolled | 7 | 16 | 3 | 8 | 6 | $\mathbf{4 0}$ |  |  |  |
|  | 219 | 345 | 171 | 104 | 152 | $\mathbf{9 9 1}$ |  |  |  |
|  | $\mathbf{2 2 6}$ | $\mathbf{3 6 1}$ | $\mathbf{1 7 4}$ | $\mathbf{1 1 2}$ | $\mathbf{1 5 8}$ | $\mathbf{1 0 3 1}$ |  |  |  |


|  | Expected | Strongly Agree | Agree | Neutral | Disagree |
| :--- | :---: | :---: | :---: | :---: | :---: |
| Strongly Disagree |  |  |  |  |  |
| Dropouts | 8.768186227 | 14.00581959 | 6.750727449 | 4.345295829 | 6.129970902 |
| Enrolled | 217.2318138 | 346.9941804 | 167.2492726 | 107.6547042 | 151.8700291 |
|  |  |  |  |  |  |


| Table | Observed | Expected | Observed-Expected | (O-E)*(O-E)/E |
| :---: | :---: | :---: | :---: | :---: |
| Dropout SA | 7 | 8.76818622 | -1.768186227 | 0.356571183 |
| Dropout A | 16 | 14.0058195 | 1.994180407 | 0.283935936 |
| Dropout N | 3 | 6.75072744 | -3.750727449 | 2.083917104 |
| Dropout D | 8 | 4.34529582 | 3.654704171 | 3.073867258 |
| Dropout SD | 6 | 6.12997090 | -0.129970902 | 0.002755712 |
| Enrolled SA | 219 | 217.231813 | 1.768186227 | 0.014392379 |
| Enrolled A | 345 | 346.994180 | -1.994180407 | 0.011460583 |
| Enrolled N | 171 | 167.249272 | 3.750727449 | 0.084113708 |
| Enrolled D | 104 | 107.654704 | -3.654704171 | 0.124071332 |
| Enrolled SD | 152 | 151.870029 | 0.129970902 | 0.00011123 |
|  |  |  | Chi-square $=6.035196424$ |  |
|  |  |  | $D F=4$ |  |
|  |  |  | Alpha (critical value) $=9.49$ |  |
|  |  |  | Cumulative Probability $=0.8$ |  |
|  |  |  | P-Value | 0.196535157 |

Question 23: "I have a teacher who is a positive role model for me."

| Observed | Strongly Agree | Agree | Neutral | Disagree | Strongly Disagree | Total <br> 40 <br> 991 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Dropouts | 7 | 12 | 6 | 11 | 4 |  |
| Enrolled | 253 | 359 | 197 | 77 | 105 |  |
|  | 260 | 371 | 203 | 88 | 109 |  |


|  | Expected | Strongly Agree |  | Agree | Neutral |
| :--- | :--- | :---: | :---: | :---: | :---: |
| Disagree |  | Strongly Disagree |  |  |  |
| Dropouts | 10.08729389 | 14.39379243 | 7.875848691 | 3.414161009 | 4.228903977 |
| Enrolled | 249.9127061 | 356.6062076 | 195.1241513 | 84.58583899 | 104.771096 |
|  |  |  |  |  |  |



Question 24: "Teachers enjoy working with students."

| Observed | Strongly Agree | Agree | Neutral | Disagree | Strongly Disagree | Total <br> 40 <br> 991 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Dropouts | 2 | 18 | 10 | 5 | 5 |  |
| Enrolled | 164 | 466 | 230 | 59 | 72 |  |
|  | 166 | 484 | 240 | 64 | 77 |  |


| Expected | Strongly Agree | Agree | Neutral | Disagree | Strongly Disagree |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Dropouts | 6.440349176 | 18.77788555 | 9.311348206 | 2.483026188 | 2.987390883 |
| Enrolled | 159.5596508 | 465.2221145 | 230.6886518 | 61.51697381 | 74.01260912 |


| Table | Observed | Expected | Observed-Expected | $(\mathrm{O}-\mathrm{E})^{*}(\mathrm{O}-\mathrm{E}) / \mathrm{E}$ |
| :---: | :---: | :---: | :---: | :---: |
| Dropout SA | 2 | 6.44034917 | -4.440349176 | 3.061433513 |
| Dropout A | 18 | 18.7778855 | -0.777885548 | 0.032224391 |
| Dropout N | 10 | 9.31134820 | 0.688651794 | 0.050931539 |
| Dropout D | 5 | 2.48302618 | 2.516973812 | 2.551385563 |
| Dropout SD | 5 | 2.98739088 | 2.012609117 | 1.355897376 |
| Enrolled SA | 164 | 159.559650 | 4.440349176 | 0.123569466 |
| Enrolled A | 466 | 465.222114 | 0.777885548 | 0.001300682 |
| Enrolled N | 230 | 230.688651 | -0.688651794 | 0.002055763 |
| Enrolled D | 59 | 61.5169738 | -2.516973812 | 0.102982263 |
| Enrolled SD | 72 | 74.0126091 | -2.012609117 | 0.054728451 |
|  |  |  | Chi-square $=7.336509007$ |  |
|  |  |  | $D F=4$ |  |
|  |  |  | Alpha (critical value) $=9.49$ |  |
|  |  |  | Cumulative Probability $=0.88$ |  |
|  |  |  | P -Value | 0.11913842 |

Question 25: "Teachers make school an exciting place to learn."

| Observed | Strongly Agree |  | Agree |  | Neutral |  |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: | Disagree | Strongly Disagree |
| :---: | Total


|  | Expected | Strongly Agree |  | Agree | Neutral |
| :--- | :---: | :---: | :---: | :---: | :---: |
| Disagree |  | Strongly Disagree |  |  |  |
| Dropouts | 3.724539282 | 15.51891368 | 9.970902037 | 5.974781765 | 4.81086324 |
| Enrolled | 92.27546072 | 384.4810863 | 247.029098 | 148.0252182 | 119.1891368 |
|  |  |  |  |  |  |


| Table | Observed | Expected | Observed-Expected | $(\mathrm{O}-\mathrm{E})^{*}(\mathrm{O}-\mathrm{E}) / \mathrm{E}$ |
| :---: | :---: | :---: | :---: | :---: |
| Dropout SA | 1 | 3.72453928 | -2.724539282 | 1.993028866 |
| Dropout A | 13 | 15.5189136 | -2.518913676 | 0.408851176 |
| Dropout N | 12 | 9.97090203 | 2.029097963 | 0.412925383 |
| Dropout D | 8 | 5.97478176 | 2.025218235 | 0.686470077 |
| Dropout SD | 6 | 4.81086324 | 1.18913676 | 0.293927756 |
| Enrolled SA | 95 | 92.2754607 | 2.724539282 | 0.080445161 |
| Enrolled A | 387 | 384.481086 | 2.518913676 | 0.01650257 |
| Enrolled N | 245 | 247.029098 | -2.029097963 | 0.016667018 |
| Enrolled D | 146 | 148.025218 | -2.025218235 | 0.027708177 |
| Enrolled SD | 118 | 119.189136 | -1.18913676 | 0.011863885 |
|  |  |  | Chi-square $=3.948390069$ |  |
|  |  |  | $D F=4$ |  |
|  |  |  | Alpha (critical value) $=9.49$ |  |
|  |  |  | Cumulative Probability $=0.59$ |  |
|  |  |  | P-Value | 0.413035576 |

Question 26: "Teachers respect students."

| Observed | Strongly Agree | Agree | Neutral | Disagree | Strongly Disagree | Total |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Dropouts | 2 | 18 | 8 | 5 | 7 | 40 |
| Enrolled | 155 | 421 | 218 | 99 | 98 | 991 |
|  | 157 | 439 | 226 | 104 | 105 | 1031 |


| Expected | Strongly Agree | Agree | Neutral | Disagree | Strongly Disagree |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Dropouts | 6.091173618 | 17.03200776 | 8.768186227 | 4.034917556 | 4.07371484 |
| Enrolled | 150.9088264 | 421.9679922 | 217.2318138 | 99.96508244 | 100.9262852 |


| Table | Observed | Expected | Observed-Expected | $(\mathrm{O}-\mathrm{E})^{\star}(\mathrm{O}-\mathrm{E}) / \mathrm{E}$ |
| :--- | :---: | :---: | :---: | :---: |
| Dropout SA | 2 | 6.09117361 | -4.091173618 | 2.747861516 |
| Dropout A | 18 | 17.0320077 | 0.967992241 | 0.055014593 |
| Dropout N | 8 | 8.76818622 | -0.768186227 | 0.067301271 |
| Dropout D | 5 | 4.03491755 | 0.965082444 | 0.230831017 |
| Dropout SD | 7 | 4.07371484 | 2.92628516 | 2.102048173 |
| Enrolled SA | 155 | 150.908826 | 4.091173618 | 0.110912675 |
| Enrolled A | 421 | 421.967992 | -0.967992241 | 0.002220569 |
| Enrolled N | 218 | 217.231813 | 0.768186227 | 0.002716499 |
| Enrolled D | 99 | 99.9650824 | -0.965082444 | 0.009317095 |
| Enrolled SD | 98 | 100.926285 | -2.92628516 | 0.084845537 |
|  | Chi-square $=$ |  |  | 5.413068945 |

Question 27: "Students respect teachers."

| Observed | Strongly Agree | Agree | Neutral | Disagree | Strongly Disagree | $\begin{gathered} \text { Total } \\ 40 \\ 991 \\ 1031 \end{gathered}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Dropouts | 2 | 12 | 11 | 11 | 4 |  |
| Enrolled | 51 | 270 | 251 | 252 | 167 |  |
|  | 53 | 282 | 262 | 263 | 171 |  |


|  | Expected | Strongly Agree | Agree | Neutral | Disagree |
| :--- | :---: | :---: | :---: | :---: | :---: |
| Strongly Disagree |  |  |  |  |  |
| Dropouts | 2.056256062 | 10.94083414 | 10.16488846 | 10.20368574 | 6.634335597 |
| Enrolled | 50.94374394 | 271.0591659 | 251.8351115 | 252.7963143 | 164.3656644 |
|  |  |  |  |  |  |


| Table | Observed | Expected | Observed-Expected | (O-E)*(O-E)/E |
| :---: | :---: | :---: | :---: | :---: |
| Dropout SA | 2 | 2.05625606 | -0.056256062 | 0.001539081 |
| Dropout A | 12 | 10.9408341 | 1.059165858 | 0.102536269 |
| Dropout N | 11 | 10.1648884 | 0.835111542 | 0.068609832 |
| Dropout D | 11 | 10.2036857 | 0.796314258 | 0.062145818 |
| Dropout SD | 4 | 6.63433559 | -2.634335597 | 1.046031503 |
| Enrolled SA | 51 | 50.9437439 | 0.056256062 | 6.21223E-05 |
| Enrolled A | 270 | 271.059165 | -1.059165858 | 0.004138699 |
| Enrolled N | 251 | 251.835111 | -0.835111542 | 0.002769317 |
| Enrolled D | 252 | 252.796314 | -0.796314258 | 0.002508408 |
| Enrolled SD | 167 | 164.365664 | 2.634335597 | 0.042221251 |
|  |  |  | Chi-square $=1.332562301$ |  |
|  |  |  | DF= 4 |  |
|  |  |  | Alpha (critical value) $=9.49$ |  |
|  |  |  | Cumulative Probability $=0.14$ |  |
|  |  |  | P -Value | 0.855827142 |

Question 28: "Students respect each other."

| Observed | Strongly Agree | Agree | Neutral | Disagree | Strongly Disagree | Total |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Dropouts | 1 | 14 | 10 | 10 | 6 | 41 |
| Enrolled | 38 | 233 | 254 | 249 | 217 | 991 |
|  | 39 | 247 | 264 | 259 | 223 | 1032 |


|  | Expected | Strongly Agree | Agree | Neutral | Disagree |  | Strongly Disagree |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Dropouts | 1.549418605 | 9.812984496 | 10.48837209 | 10.28972868 | 8.859496124 |  |  |
| Enrolled | 37.4505814 | 237.1870155 | 253.5116279 | 248.7102713 | 214.1405039 |  |  |
|  |  |  |  |  |  |  |  |


| Table | Observed | Expected | Observed-Expected | $(\mathrm{O}-\mathrm{E})^{*}(\mathrm{O}-\mathrm{E}) / \mathrm{E}$ |
| :---: | :---: | :---: | :---: | :---: |
| Dropout SA | 1 | 1.54941860 | -0.549418605 | 0.194821982 |
| Dropout A | 14 | 9.81298449 | 4.187015504 | 1.786520588 |
| Dropout N | 10 | 10.4883720 | -0.488372093 | 0.022740164 |
| Dropout D | 10 | 10.2897286 | -0.289728682 | 0.008157913 |
| Dropout SD | 6 | 8.85949612 | -2.859496124 | 0.922932633 |
| Enrolled SA | 38 | 37.4505814 | 0.549418605 | 0.008060243 |
| Enrolled A | 233 | 237.187015 | -4.187015504 | 0.073912557 |
| Enrolled N | 254 | 253.511627 | 0.488372093 | 0.000940814 |
| Enrolled D | 249 | 248.710271 | 0.289728682 | 0.000337512 |
| Enrolled SD | 217 | 214.140503 | 2.859496124 | 0.038183893 |
|  |  |  | Chi-square $=3.056608299$ |  |
|  |  |  | $D F=4$ |  |
|  |  |  | Alpha (critical value) $=9.49$ |  |
|  |  |  | Cumulative Probability $=0.45$ |  |
|  |  |  | P -Value | 0.548397247 |

Question 29: "Safety is important at my school."

| Observed | Strongly Agree | Agree | Neutral | Disagree | Strongly Disagree | Total |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Dropouts | 4 | 24 | 7 | 4 | 2 | 41 |
| Enrolled | 235 | 417 | 211 | 54 | 74 | 991 |
|  | 239 | 441 | 218 | 58 | 76 | 1032 |


|  | Expected | Strongly Agree |  | Agree | Neutral |  | Disagree |  | Strongly Disagree |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Dropouts | 9.495155039 | 17.52034884 | 8.660852713 | 2.304263566 | 3.019379845 |  |  |  |  |
|  | 229.504845 | 423.4796512 | 209.3391473 | 55.69573643 | 72.98062016 |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |


| Table | Observed | Expected | Observed-Expected | $(\mathrm{O}-\mathrm{E})^{*}(\mathrm{O}-\mathrm{E}) / \mathrm{E}$ |
| :---: | :---: | :---: | :---: | :---: |
| Dropout SA | 4 | 9.49515503 | -5.495155039 | 3.180224944 |
| Dropout A | 24 | 17.5203488 | 6.479651163 | 2.396406577 |
| Dropout N | 7 | 8.66085271 | -1.660852713 | 0.318494244 |
| Dropout D | 4 | 2.30426356 | 1.695736434 | 1.247913692 |
| Dropout SD | 2 | 3.01937984 | -1.019379845 | 0.344155198 |
| Enrolled SA | 235 | 229.504845 | 5.495155039 | 0.131573383 |
| Enrolled A | 417 | 423.479651 | -6.479651163 | 0.099144974 |
| Enrolled N | 211 | 209.339147 | 1.660852713 | 0.013176856 |
| Enrolled D | 54 | 55.6957364 | -1.695736434 | 0.051629123 |
| Enrolled SD | 74 | 72.9806201 | 1.019379845 | 0.01423851 |
|  |  |  | Chi-square $=7.796957501$ |  |
|  |  |  | $D F=4$ |  |
|  |  |  | Alpha (critical value) $=9.49$ |  |
|  |  |  | Cumulative Probability $=0.9$ |  |
|  |  |  | $P$-Value | 0.099305527 |

Question 30: "I push myself to do better academically."

| Observed | Strongly Agree | Agree | Neutral | Disagree | Strongly Disagree | Total <br> 41 <br> 991 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Dropouts | 5 | 13 | 9 | 13 | 1 |  |
| Enrolled | 356 | 406 | 138 | 40 | 51 |  |
|  | 361 | 419 | 147 | 53 | 52 | 1032 |


| Expected | Strongly Agree |  | Agree | Neutral | Disagree |
| :--- | :---: | :---: | :---: | :---: | :---: |
| Strongly Disagree |  |  |  |  |  |
| Dropouts | 14.34205426 | 16.64631783 | 5.840116279 | 2.105620155 | 2.065891473 |
| Enrolled | 346.6579457 | 402.3536822 | 141.1598837 | 50.89437984 | 49.93410853 |
|  |  |  |  |  |  |


| Table | Observed | Expected | Observed-Expected | $(\mathrm{O}-\mathrm{E})^{\star}(\mathrm{O}-\mathrm{E}) / \mathrm{E}$ |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Dropout SA | 5 | 14.3420542 | -9.342054264 | 6.085179728 |  |  |
| Dropout A | 13 | 16.6463178 | -3.646317829 | 0.798713196 |  |  |
| Dropout N | 9 | 5.84011627 | 3.159883721 | 1.709703138 |  |  |
| Dropout D | 13 | 2.10562015 | 10.89437984 | 56.36700994 |  |  |
| Dropout SD | 1 | 2.06589147 | -1.065891473 | 0.549944006 |  |  |
| Enrolled SA | 356 | 346.657945 | 9.342054264 | 0.251758193 |  |  |
| Enrolled A | 406 | 402.353682 | 3.646317829 | 0.033044643 |  |  |
| Enrolled N | 138 | 141.159883 | -3.159883721 | 0.070734439 |  |  |
| Enrolled D | 40 | 50.8943798 | -10.89437984 | 2.332035729 |  |  |
| Enrolled SD | 51 | 49.9341085 | 1.065891473 | 0.022752477 |  |  |
|  |  | Chi-square $=$ |  |  |  | 68.22087549 |
|  |  | DF |  |  |  |  |

Question 31: "I put forth my best effort at school."

| Observed | Strongly Agree | Agree | Neutral | Disagree | Strongly Disagree | Total <br> 41 <br> 991 <br> 1032 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Dropouts | 5 | 19 | 3 | 13 | 1 |  |
| Enrolled | 303 | 437 | 139 | 56 | 56 |  |
|  | 308 | 456 | 142 | 69 | 57 |  |


| Expected | Strongly Agree | Agree | Neutral | Disagree | Strongly Disagree |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Dropouts | 12.23643411 | 18.11627907 | 5.641472868 | 2.74127907 | 2.264534884 |
| Enrolled | 295.7635659 | 437.8837209 | 136.3585271 | 66.25872093 | 54.73546512 |


| Table | Observed | Expected | Observed-Expected | (O-E)*(O-E)/E |
| :---: | :---: | :---: | :---: | :---: |
| Dropout SA | 5 | 12.2364341 | -7.236434109 | 4.279512981 |
| Dropout A | 19 | 18.1162790 | 0.88372093 | 0.043108338 |
| Dropout N | 3 | 5.64147286 | -2.641472868 | 1.236800934 |
| Dropout D | 13 | 2.74127907 | 10.25872093 | 38.39133209 |
| Dropout SD | 1 | 2.26453488 | -1.264534884 | 0.706126668 |
| Enrolled SA | 303 | 295.763565 | 7.236434109 | 0.177053514 |
| Enrolled A | 437 | 437.883720 | -0.88372093 | 0.001783493 |
| Enrolled N | 139 | 136.358527 | 2.641472868 | 0.051169363 |
| Enrolled D | 56 | 66.2587209 | -10.25872093 | 1.588339673 |
| Enrolled SD | 56 | 54.7354651 | 1.264534884 | 0.02921412 |
|  |  |  | Chi-square $=46.50444118$ |  |
|  |  |  | $D F=4$ |  |
|  |  |  | Alpha (critical value) $=9.49$ |  |
|  |  |  | Cumulative Probability = 1 |  |
|  |  |  | P -Value | $1.93393 \mathrm{E}-09$ |

Question 32: "I am excited to tell my friends when I get good grades."

| Observed | Strongly Agree |  |  | Agree |  | Neutral |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: | Disagree | Strongly Disagree |
| :---: | Total


|  | Expected | Strongly Agree |  | Agree | Neutral |
| :--- | :---: | :---: | :---: | :---: | :---: |
| Disagree | Strongly Disagree |  |  |  |  |
| Dropouts | 10.6870155 | 13.8255814 | 9.296511628 | 3.893410853 | 3.29748062 |
| Enrolled | 258.3129845 | 334.1744186 | 224.7034884 | 94.10658915 | 79.70251938 |
|  |  |  |  |  |  |


| Table | Observed | Expected | Observed-Expected | $(\mathrm{O}-\mathrm{E})^{*}(\mathrm{O}-\mathrm{E}) / \mathrm{E}$ |
| :---: | :---: | :---: | :---: | :---: |
| Dropout SA | 4 | 10.6870155 | -6.687015504 | 4.184159397 |
| Dropout A | 25 | 13.8255814 | 11.1744186 | 9.031636904 |
| Dropout N | 5 | 9.29651162 | -4.296511628 | 1.985692366 |
| Dropout D | 6 | 3.89341085 | 2.106589147 | 1.139802092 |
| Dropout SD | 1 | 3.29748062 | -2.29748062 | 1.600742448 |
| Enrolled SA | 265 | 258.312984 | 6.687015504 | 0.173108512 |
| Enrolled A | 323 | 334.174418 | -11.1744186 | 0.373660054 |
| Enrolled N | 229 | 224.703488 | 4.296511628 | 0.082152762 |
| Enrolled D | 92 | 94.1065891 | -2.106589147 | 0.047156292 |
| Enrolled SD | 82 | 79.7025193 | 2.29748062 | 0.066226479 |
|  |  |  | Chi-square $=18.68433731$ |  |
|  |  |  | $D F=4$ |  |
|  |  |  | Alpha (critical value) $=9.49$ |  |
|  |  |  | Cumulative Probability $=0.9991$ |  |
|  |  |  | P-Value | 0.000906482 |

Question 33: "I am afraid my friends won't like me if I do well in school."

| Observed | Strongly Agree |  | Agree |  | Neutral | Disagree |  | Strongly Disagree |  | Total |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | $\mathbf{4}$ |  |  |  |  |  |  |  |  |  |
| Dropouts |  |  |  |  |  |  |  |  |  |  |
| Enrolled | 0 | 4 | 4 | 16 | 17 | $\mathbf{4 1}$ |  |  |  |  |
|  | $\mathbf{4 5}$ | 44 | 164 | 186 | 552 | $\mathbf{9 9 1}$ |  |  |  |  |
|  | $\mathbf{4 5}$ | $\mathbf{4 8}$ | $\mathbf{1 6 8}$ | $\mathbf{2 0 2}$ | $\mathbf{5 6 9}$ | $\mathbf{1 0 3 2}$ |  |  |  |  |


| Expected | Strongly Agree | Agree | Neutral | Disagree | Strongly Disagree |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Dropouts | 1.787790698 | 1.906976744 | 6.674418605 | 8.025193798 | 22.60562016 |
| Enrolled | 43.2122093 | 46.09302326 | 161.3255814 | 193.9748062 | 546.3943798 |


| Table | Observed | Expected | Observed-Expected | (O-E)*(O-E)/E |
| :---: | :---: | :---: | :---: | :---: |
| Dropout SA | 0 | 1.78779069 | -1.787790698 | 1.787790698 |
| Dropout A | 4 | 1.90697674 | 2.093023256 | 2.297220647 |
| Dropout N | 4 | 6.67441860 | -2.674418605 | 1.071631148 |
| Dropout D | 16 | 8.02519379 | 7.974806202 | 7.924734972 |
| Dropout SD | 17 | 22.6056201 | -5.605620155 | 1.390051549 |
| Enrolled SA | 45 | 43.2122093 | 1.787790698 | 0.073965105 |
| Enrolled A | 44 | 46.0930232 | -2.093023256 | 0.095041419 |
| Enrolled N | 164 | 161.325581 | 2.674418605 | 0.0443359 |
| Enrolled D | 186 | 193.974806 | -7.974806202 | 0.327864918 |
| Enrolled SD | 552 | 546.394379 | 5.605620155 | 0.057509701 |
|  |  |  | Chi-square $=15.07014606$ |  |
|  |  |  | $D F=4$ |  |
|  |  |  | Alpha (critical value) $=9.49$ |  |
|  |  |  | Cumulative Probability $=0.995$ |  |
|  |  |  | P-Value | 0.004557919 |

Question 34: "My parents care about my education."

| Observed | Strongly Agree | Agree | Neutral | Disagree | Strongly Disagree | Total <br> 41 <br> 991 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Dropouts | 19 | 16 | 2 | 2 | 2 |  |
| Enrolled | 693 | 174 | 61 | 13 | 50 |  |
|  | 712 | 190 | 63 | 15 | 52 | 1032 |


|  | Expected | Strongly Agree | Agree | Neutral | Disagree |  | Strongly Disagree |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Dropouts | 28.28682171 | 7.548449612 | 2.502906977 | 0.595930233 | 2.065891473 |  |  |
| Enrolled | 683.7131783 | 182.4515504 | 60.49709302 | 14.40406977 | 49.93410853 |  |  |
|  |  |  |  |  |  |  |  |


| Table | Observed | Expected | Observed-Expected | (O-E)*(O-E)/E |
| :---: | :---: | :---: | :---: | :---: |
| Dropout SA | 19 | 28.2868217 | -9.286821705 | 3.048948315 |
| Dropout A | 16 | 7.54844961 | 8.451550388 | 9.46269865 |
| Dropout N | 2 | 2.50290697 | -0.502906977 | 0.101048672 |
| Dropout D | 2 | 0.59593023 | 1.404069767 | 3.308125355 |
| Dropout SD | 2 | 2.06589147 | -0.065891473 | 0.002101604 |
| Enrolled SA | 693 | 683.713178 | 9.286821705 | 0.12614216 |
| Enrolled A | 174 | 182.451550 | -8.451550388 | 0.391494091 |
| Enrolled N | 61 | 60.4970930 | 0.502906977 | 0.004180621 |
| Enrolled D | 13 | 14.4040697 | -1.404069767 | 0.136864924 |
| Enrolled SD | 50 | 49.9341085 | 0.065891473 | 8.69483E-05 |
|  |  |  | Chi-square $=16.58169134$ |  |
|  |  |  | DF= 4 |  |
|  |  |  | Alpha (critical value) $=9.49$ |  |
|  |  |  | Cumulative Probability $=0.997$ |  |
|  |  |  | P-Value | 0.002330165 |

Question 35: "My parents think going to college is important."

| Observed | Strongly Agree | Agree | Neutral | Disagree | Strongly Disagree | $\begin{gathered} \text { Total } \\ \mathbf{4 1} \\ 991 \end{gathered}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Dropouts | 16 | 15 | 5 | 5 | 0 |  |
| Enrolled | 688 | 171 | 74 | 13 | 45 |  |
|  | 704 | 186 | 79 | 18 | 45 | 1032 |


| Expected | Strongly Agree | Agree | Neutral | Disagree | Strongly Disagree |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Dropouts | 27.96899225 | 7.389534884 | 3.138565891 | 0.715116279 | 1.787790698 |
| Enrolled | 676.0310078 | 178.6104651 | 75.86143411 | 17.28488372 | 43.2122093 |


| Table | Observed | Expected | Observed-Expected | $(\mathrm{O}-\mathrm{E})^{*}(\mathrm{O}-\mathrm{E}) / \mathrm{E}$ |
| :---: | :---: | :---: | :---: | :---: |
| Dropout SA | 16 | 27.9689922 | -11.96899225 | 5.121985596 |
| Dropout A | 15 | 7.38953488 | 7.610465116 | 7.838000659 |
| Dropout N | 5 | 3.13856589 | 1.861434109 | 1.103987318 |
| Dropout D | 5 | 0.71511627 | 4.284883721 | 25.67446587 |
| Dropout SD | 0 | 1.78779069 | -1.787790698 | 1.787790698 |
| Enrolled SA | 688 | 676.031007 | 11.96899225 | 0.211908587 |
| Enrolled A | 171 | 178.610465 | -7.610465116 | 0.324276516 |
| Enrolled N | 74 | 75.8614341 | -1.861434109 | 0.045674551 |
| Enrolled D | 13 | 17.2848837 | -4.284883721 | 1.062213018 |
| Enrolled SD | 45 | 43.2122093 | 1.787790698 | 0.073965105 |
|  |  |  | Chi-square $=43.24426792$ |  |
|  |  |  | $D F=4$ |  |
|  |  |  | Alpha (critical value) $=9.49$ |  |
|  |  |  | Cumulative Probability = 1 |  |
|  |  |  | P-Value | 9.20789E-09 |

Question 36: "My parents feel comfortable talking to my teachers."

| Observed | Strongly Agree | Agree | Neutral | Disagree | Strongly Disagree | Total <br> 41 <br> 991 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Dropouts | 10 | 12 | 13 | 5 | 1 |  |
| Enrolled | 339 | 337 | 207 | 36 | 72 |  |
|  | 349 | 349 | 220 | 41 | 73 | 1032 |


| Expected | Strongly Agree |  | Agree | Neutral | Disagree |  | Strongly Disagree |  |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Dropouts | 13.86531008 | 13.86531008 | 8.740310078 | 1.628875969 | 2.900193798 |  |  |  |
| Enrolled | 335.1346899 | 335.1346899 | 211.2596899 | 39.37112403 | 70.0998062 |  |  |  |
|  |  |  |  |  |  |  |  |  |


| Table | Observed | Expected | Observed-Expected | $(\mathrm{O}-\mathrm{E})^{*}(\mathrm{O}-\mathrm{E}) / \mathrm{E}$ |
| :--- | :---: | :---: | :---: | :---: |
| Dropout SA | 10 | 13.8653100 | -3.865310078 | 1.07755412 |
| Dropout A | 12 | 13.8653100 | -1.865310078 | 0.250941498 |
| Dropout N | 13 | 8.74031007 | 4.259689922 | 2.076008525 |
| Dropout D | 5 | 1.62887596 | 3.371124031 | 6.976883108 |
| Dropout SD | 1 | 2.90019379 | -1.900193798 | 1.244998342 |
| Enrolled SA | 339 | 335.134689 | 3.865310078 | 0.044580947 |
| Enrolled A | 337 | 335.134689 | 1.865310078 | 0.01038204 |
| Enrolled N | 207 | 211.259689 | -4.259689922 | 0.085889354 |
| Enrolled D | 36 | 39.3711240 | -3.371124031 | 0.288650058 |
| Enrolled SD | 72 | 70.0998062 | 1.900193798 | 0.051508509 |
|  | Chi-square $=$ |  |  | 12.1073965 |
|  |  |  | DF $=$ | 4 |
|  |  |  | Alpha (critical value) $=$ | 9.49 |
|  |  | Cumulative Probability $=$ | 0.98 |  |
|  |  | P-Value | 0.016570253 |  |

## Appendix H

Cohen's Effect Size for the T Statistic

| Condition | Cohen’s $\hat{d}$ |
| :--- | ---: |
| Confidence to Take Action | 0.224 |
| The Role of Parents | 0.113 |
| Curiosity \& Creativity | 0.100 |
| Fun \& Excitement | 0.067 |
| Spirit of Adventure | 0.066 |
| Belonging | 0.053 |
| Heroes | 0.037 |
| Sense of Accomplishment | -0.005 |
| Leadership \& Responsibility | No Data |

## Appendix I

## Independent T-Test

Group Statistics

|  | Status | N | Mean | Std. Deviation | Std. Error Mean |
| :--- | :--- | ---: | ---: | ---: | ---: |
| Belonging | 2 | 3964 | 3.22 | 1.348 | .021 |
|  | 1 | 164 | 3.04 | 1.235 | .096 |

Independent Samples Test

|  | Levene's Test for Equality of Variances |  | t-test for Equality of Means |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | F | Sig. | t | df | $\begin{aligned} & \text { Sig. (2- } \\ & \text { tailed) } \end{aligned}$ | Mean Difference | Std. Error <br> Difference | 95\% Confidence Interval of the Difference |  |
|  |  |  |  |  |  |  |  | Lower | Upper |
| Belonging Equal <br> variances <br> assumed | 2.433 | . 119 | $1.694$ | $4126$ | . 090 | . 181 | . 107 | -. 029 | . 391 |
| Equal <br> variances not assumed |  |  | 1.835 | 179.436 | . 068 | . 181 | . 099 | -. 014 | . 376 |

Group Statistics

|  | Status | N | Mean | Std. Deviation | Std. Error Mean |
| :--- | :--- | ---: | ---: | ---: | ---: |
| Confidence to take action | 2 | 1982 | 4.00 | 1.106 | .025 |
|  | 1 | 81 | 3.36 | 1.207 | .134 |


| Independent Samples Test |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Levene's Test for Equality of Variances |  | t-test for Equality of Means |  |  |  |  |  |  |
|  | F | Sig. | t | df | Sig. <br> (2tailed) | Mean Difference | Std. Error Difference | 95\% Confidence Interval of the Difference |  |
|  |  |  |  |  |  |  |  | Lower | Upper |
| Confidence Equal to take action variances assumed | 7.088 | . 008 | $5.088$ | $2061$ | $000$ | . 640 | . 126 | . 394 | . 887 |
| Equal <br> variances <br> not assumed |  |  | 4.694 | 85.581 | . 000 | . 640 | . 136 | . 369 | . 912 |


| Group Statistics |  |  |  |  |  |
| :--- | :--- | ---: | ---: | ---: | ---: |
|  | Status | N | Mean | Std. Deviation | Std. Error Mean |
| Curiosity and Creativity | 2 | 1982 | 3.45 | 1.184 | .027 |
|  | 1 | 82 | 3.15 | 1.177 | .130 |

Independent Samples Test

|  |  | Levene's Test for Equality of Variances |  | t-test for Equality of Means |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | F | Sig. | t | df | Sig. (2-tailed) | Mean <br> Difference | Std. Error Difference | 95\% Confidence Interval of the Difference |  |
|  |  | Lower |  |  |  |  |  |  | Upper |
| Curiosity <br> and <br> Creativity | Equal <br> variances assumed |  | . 021 | . 885 | $2.269$ | $2062$ | $.023$ | . 303 | . 133 | . 041 | . 564 |
|  | Equal <br> variances not assumed |  |  | 2.281 | 87.914 | . 025 | . 303 | . 133 | . 039 | . 566 |


| Group Statistics |  |  |  |  |  |
| :--- | :--- | ---: | ---: | ---: | ---: |
|  | Status | N | Mean | Std. Deviation | Std. Error Mean |
| Fun and Excitement | 2 | 3964 | 3.30 | 1.185 | .019 |
|  | 1 | 162 | 3.09 | 1.210 | .095 |


| Independent Samples Test |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Levene's Test for Equality of Variances |  | t-test for Equality of Means |  |  |  |  |  |  |
|  |  | F | Sig. | t | df | Sig. (2-tailed) | Mean <br> Difference | Std. Error Difference | 95\% Confidence Interval of the Difference |  |
|  |  | Lower |  |  |  |  |  |  | Upper |
| Fun and Excitement | Equal <br> variances assumed |  | . 192 | . 661 | $2.150$ | $4124$ | $.032$ | . 204 | . 095 | . 018 | . 391 |
|  | Equal <br> variances <br> not assumed |  |  | 2.109 | 173.860 | . 036 | . 204 | . 097 | . 013 | . 396 |


| Group Statistics |  |  |  |  |  |
| :--- | :--- | ---: | ---: | ---: | ---: |
|  | Status | N | Mean | Std. Deviation | Std. Error Mean |
| Heroes | 2 | 6937 | 3.23 | 1.263 | .015 |
|  | 1 | 281 | 3.10 | 1.233 | .074 |

Independent Samples Test

|  | Levene's Test for Equality of Variances |  | t-test for Equality of Means |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | F | Sig. | t | df | Sig. (2- <br> tailed) | Mean <br> Difference | Std. Error Difference | 95\% Confidence Interval of the Difference |  |
|  |  |  |  |  |  |  |  | Lower | Upper |
| Heroes Equal variances assumed | . 037 | . 847 | $1.587$ | $7216$ | $.113$ | . 122 | . 077 | -. 029 | . 272 |
| Equal variances not assumed |  |  | 1.622 | 304.265 | . 106 | . 122 | . 075 | -. 026 | . 270 |


|  | Group Statistics |  |  |  |  |
| :--- | :--- | :--- | :--- | ---: | ---: |
|  | Status | N | Mean | Std. Deviation | Std. Error Mean |
| Sense of Accomplishment | 2 | 1982 | 3.19 | 1.353 | .030 |
|  | 1 | 81 | 3.21 | 1.252 | .139 |

Independent Samples Test

|  |  | Levene's <br> Test for <br> Equality of <br> Variances |  | t-test for Equality of Means |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | F | Sig. | t | df | $\begin{gathered} \text { Sig. } \\ (2- \\ \text { tailed) } \end{gathered}$ | Mean <br> Difference | Std. Error Difference | 95\% Confidence Interval of the Difference |  |
|  |  | Lower |  |  |  |  |  |  | Upper |
| Sense of Accomplishment | Equal <br> variances assumed |  | . 837 | . 360 | $\text { . } 105$ | $2061$ | $.916$ | $\text { . } 016$ | . 153 | -. 316 | . 284 |
|  | Equal <br> variances <br> not <br> assumed |  |  | $\begin{array}{r} - \\ .113 \end{array}$ | 87.811 | . 910 | -. 016 | . 142 | -. 299 | . 267 |

Group Statistics

|  | Status | N | Mean | Std. Deviation | Std. Error Mean |
| :--- | :--- | ---: | ---: | ---: | ---: |
| Spirit of Adventure | 2 | 2973 | 3.14 | 1.472 | .027 |
|  | 1 | 123 | 2.89 | 1.240 | .112 |


| Independent Samples Test |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Levene's Test for Equality of Variances |  | t-test for Equality of Means |  |  |  |  |  |  |
|  |  | F | Sig. | t | df | Sig. (2tailed) | Mean Difference | Std. Error Difference | 95\% Confidence Interval of the Difference |  |
|  |  | Lower |  |  |  |  |  |  | Upper |
| Spirit of Adventure | Equal <br> variances <br> assumed |  | 7.893 | . 005 | $1.827$ | $3094$ | $\text { . } 068$ | . 246 | . 135 | -. 018 | . 510 |
|  | Equal <br> variances <br> not <br> assumed |  |  | 2.138 | 136.611 | . 034 | . 246 | . 115 | . 018 | . 473 |


| Group Statistics |  |  |  |  |  |
| :--- | :--- | :--- | :--- | ---: | ---: |
|  | Status | N | Mean | Std. Deviation | Std. Error Mean |
| The Role of Parents | 2 | 2973 | 4.25 | 1.104 | .020 |
|  | 1 | 123 | 3.93 | 1.069 | .096 |

Independent Samples Test

|  |  | Levene's Test for Equality of Variances |  | t-test for Equality of Means |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | F | Sig. | t | df | $\begin{array}{\|c\|} \hline \text { Sig. (2- } \\ \text { tailed) } \\ \hline \end{array}$ | Mean <br> Difference | Std. Error <br> Difference | 95\% Confidence Interval of the Difference |  |
|  |  | Lower |  |  |  |  |  |  | Upper |
| The Role of Parents | Equal <br> variances assumed |  | . 386 | . 535 | $\|3.137\|$ | $3094$ | $002$ | $318$ | . 101 | . 119 | . 517 |
|  | Equal <br> variances <br> not assumed |  |  | 3.231 | 132.988 | . 002 | . 318 | . 099 | . 123 | . 513 |

