

Lindenwood University

Digital Commons@Lindenwood University

---

Dissertations

Theses & Dissertations

---

Spring 2-2011

## A+nyWhere Learning System Comparative Analysis of Direct Instruction and Online Learning Using the A+nyWhere Learning System in a Secondary Alternative High School

Patricia Mary Lee  
*Lindenwood University*

Follow this and additional works at: <https://digitalcommons.lindenwood.edu/dissertations>



Part of the [Educational Assessment, Evaluation, and Research Commons](#)

---

### Recommended Citation

Lee, Patricia Mary, "A+nyWhere Learning System Comparative Analysis of Direct Instruction and Online Learning Using the A+nyWhere Learning System in a Secondary Alternative High School" (2011).

*Dissertations*. 586.

<https://digitalcommons.lindenwood.edu/dissertations/586>

This Dissertation is brought to you for free and open access by the Theses & Dissertations at Digital Commons@Lindenwood University. It has been accepted for inclusion in Dissertations by an authorized administrator of Digital Commons@Lindenwood University. For more information, please contact [phuffman@lindenwood.edu](mailto:phuffman@lindenwood.edu).

A+nyWhere Learning System Comparative Analysis of Direct Instruction and Online  
Learning Using the A+nyWhere Learning System in a  
Secondary Alternative High School

by

Patricia Mary Lee

A Dissertation submitted to the Education Faculty of Lindenwood University  
in partial fulfillment of the requirements for the  
degree of

Doctor of Education

School of Education

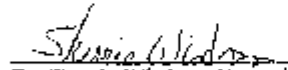
AnyWhere Learning System (A+LS) Comparative Analysis of Direct Instruction  
and Online Learning Using the AnyWhere Learning System (A+LS) in a  
Secondary Alternative High School

by  
Patricia Mary Lee

This dissertation has been approved as  
partial fulfillment of the requirements for the  
degree of Doctor of Education  
at Lindenwood University by the School of Education

  
\_\_\_\_\_  
Dr. Tyndal Lewis, Dissertation Chair

7/2/2011  
Date

  
\_\_\_\_\_  
Dr. Sherrie Wisdom, Committee Member

2-18-2011  
Date

  
\_\_\_\_\_  
Dr. William Enrick, Committee Member

2/18/2011  
Date

Declaration of Originality

I do hereby declare and attest to the fact that this is an original study based solely upon my own scholarly work here at Lindenwood University and that I have not submitted it for any other college or university course or degree here or elsewhere.

Full Legal Name: Patricia Mary Lee

Signature:  \_\_\_\_\_ Date: 2/18/2011

## Abstract

In 2010, the problem of high school students dropping out of high school continues to plague school districts across the United States. All students can learn when provided with opportunity, ample support systems, and encouragement to succeed. In this mixed methods study, the researcher investigated whether utilizing an online curriculum instead of direct instruction was an effective instructional tool for at-risk high school students attending an alternative high school. After the 2008–2009 school year, teaching methods at the participating high school were changed from direct instruction school to the A+nyWhere Learning System (A+LS) for communication arts, math, science, social studies, and some electives. The 45 students who returned to the school after the 2008–2009 school year participated in the study. The researcher gathered quantitative data to determine whether the program led to an increase in student achievement and attendance, and led to a decrease in dropout rates and early graduation rates. Qualitative data from student and staff interviews were also gathered, and a student perspective survey was administered. Twelve individuals participated in the interviews, while 27 individuals participated in the survey. The results found that the A+LS were associated with students being motivated to earn more credits, and as a result, more students applied for early graduation. The data also indicated that there was a significant decrease in the dropout rate after the implementation of the A+LS. However, the implementation of the A+LS was not associated with an increase in attendance among students. Student and teacher perceptions of the implementation of the A+LS were mixed.

## Acknowledgements

I would like to take this opportunity to thank a number of individuals whose assistance has been invaluable, and who have patiently guided me through the dissertation process. Dr. Lynda Leavitt, without your guidance, I would never have been able to make it through this process; thank you for standing by me through the ups and downs. I do appreciate all of your critiques and insightful questions throughout the process. You have made me think more deeply, write in a more scholarly fashion, and improve my research strategies. Also, the time you spent meeting with me was extremely helpful in finalizing the process.

Dr. Sherrie Wisdom, without your guidance and quantitative help, the final product of this dissertation would not have been possible. I am very grateful for the time and effort you put forth in tutoring me in the statistical process. Dr. Beth Kania-Gosche, who pushed me through her independent writing course and guided me through Capstone III, your words of wisdom, Power Points, and websites made the dissertation process a much easier one. Thank you for your extra effort and expert guidance. Dr. Kandy Worley, thank you for allowing me to conduct the research in your school. You were a great inspiration throughout the entire process and very knowledgeable on the A+LS. Ms. Jan Popham, thank you for working with me to retrieve the quantitative data over the past 2 years. Your patience and support was appreciated.

To my husband Jim, thank you for your undying patience during this process. Thank you for spending numerous nights and weekends alone and offering so much support throughout the doctoral program. Thank you for also being my proofreader and

working long hours to get me through this process. There are not enough words to explain how much the love and support you showed helped me through this process.

## Table of Contents

Abstract .....	i
Acknowledgements.....	ii
List of Tables .....	ix
List of Figures .....	x
Keys to Abbreviations.....	xi
Chapter One: Overview of Study.....	1
Absenteeism.....	9
Technology .....	10
Statement of the Problem.....	11
Purpose of the Study .....	12
Research Question and Hypotheses .....	13
Definition of Terms.....	15
Limitations of the Study.....	20
Background of the Researcher .....	21
Summary .....	22
Chapter Two: Literature Review .....	24
History of Public High School Education.....	24
Closing the Achievement Gap .....	31
Dropout Prevention Statistics .....	35
Reasons for Dropping Out .....	38
At-Risk Students .....	48



Alternatives to Dropping Out.....	49
Alternative Education .....	50
Types of Alternative Schools .....	54
Small School/Class Size.....	56
School Climate.....	58
General Education Development Program (GED).....	64
GED Options Program .....	66
Teacher Development and Expectations.....	67
Attendance .....	76
Online Learning .....	80
Prevention Programs .....	94
Summary .....	99
Chapter Three: Research Methodology .....	101
Research Overview .....	101
Research Design.....	102
Research Hypothesis and Research Questions .....	104
Dependent and Independent Variables and Internal Validity .....	106
Instrumentation .....	108
Suggested changes to the survey.....	109
Qualitative instrument alignment.....	111
Research Participants .....	119
Characteristics of Participants.....	121
Day-to-Day Operations.....	123

Alternative High School Eligibility Criteria .....	124
Data Collection and Analysis Procedures .....	125
Quantitative Data Analysis .....	126
Qualitative Data Analysis .....	128
Measures Taken for Protection of Human Subjects .....	129
Preparing the Data for Analysis .....	129
Summary .....	130
Chapter Four: Results .....	131
Qualitative Data .....	132
Survey Results .....	132
Interviews.....	135
Student Interviews .....	135
Student Themes.....	138
Student–Teacher Relationship .....	138
Student Achievement .....	141
Self-Paced Program .....	144
Motivation.....	146
College Prep.....	148
Staff Interviews.....	149
Staff Interview #1: Mr. Green.....	150
Staff Interview #2: Mrs. Allison .....	151
Staff Interview #3: Mr. Kinkaid.....	154
Staff Interview #4: Ms. Smith.....	155

Classroom Observation.....	157
Quantitative Data .....	161
Research Hypotheses .....	161
Quantitative Results .....	163
Statistical Tests Performed .....	166
Academic Credit .....	166
Attendance .....	166
Dropout and Early Graduation Data .....	166
Response to Student Survey.....	166
Summary .....	175
Chapter Five: Discussion .....	177
Review of the Methodology.....	178
Quantitative Findings.....	180
Qualitative Results .....	180
Staff Themes .....	181
Students Working at Their Own Pace.....	181
Student Attendance has not Increased Due to the Program .....	182
Student Motivation.....	182
Implications.....	184
Recommendations for Future Studies .....	187
Further Research .....	194
Summary .....	195
References.....	197

Appendix A: Student Perspective Survey of the A+nyWhere Learning System.....	216
Appendix B: Student Letter .....	219
Appendix C: Staff Letter.....	221
Appendix D: Student Interview .....	223
Appendix E: Teacher Interview .....	224
Appendix F: Parental Informed Consent .....	224
Appendix G: Informed Consent.....	229
Appendix H: Permission Letter all4ed.com.....	232
Appendix I: Permission Letter NAEP.....	233
Vitae.....	233

## List of Tables

Table 1: <i>Data Collection Time Frame</i> .....	103
Table 2: <i>District and School Demographic</i> .....	132
Table 3: <i>The A+LS Survey Results</i> .....	132
Table 4: <i>Interviewee Demographics</i> .....	136
Table 5: <i>Attendance Comparison of all 45 students</i> .....	165
Table 6: <i>Academic Achievement of all 45 students</i> .....	165
Table 7: <i>Academic Achievement Comparison of the 15 Random Samples</i> .....	165
Table 8: <i>Attendance Data Comparison of the 15 Random Samples</i> .....	165
Table 9: <i>F-Test Two-Sample for Variances</i> .....	167
Table 10: <i>T-Test: Two-Sample Assuming Equal Variances</i> .....	168
Table 11: <i>F-Test Two-Sample for Variances</i> .....	170
Table 12: <i>T-Test: Two-Sample Assuming Equal Variances</i> .....	171
Table 13: <i>Z-test for Difference in Proportions for Dropout Data</i> .....	172
Table 14: <i>Z-test for Proportions Early Graduation Data</i> .....	173
Table 15: <i>Z-test for Proportions Likert Scale</i> .....	174

List of Figures

*Figure 1:* 1990 and 2007 8th-grade mathematics achievement gap between Blacks, Whites and Latinos demographic groups.....33

*Figure 2:* Estimated 4-year graduation rate. ....36

## Key to Abbreviations

A+LS	A+nyWhere Learning System
ACE	American Council on Education
AYP	Adequate Yearly Progress
CEP	Character Education Partnership
<i>df</i>	Degrees of Freedom
FRSS	Fast Response Survey System
NAEP	National Assessment of Academic Progress
NASP	National Association of School Psychologist
NAREN	National At-Risk Education Network
NCES	National Center for Educational Statistics
NCLB	No Child Left Behind
MODESE	Missouri Department of Secondary and Elementary Education
PSEA	Pennsylvania State Education Organization
RTI	Response to Interventions

## Chapter One: Overview of Study

Many high school and middle school students strive to achieve their high school diploma and attend college, but approximately one third of all students will not reach that milestone (Barton, 2006; Alliance For Excellent Education, 2009b; Bridgeland et al, 2006; Stopping the Dropout Exodus, 2007). Receiving a high school diploma is an essential step for entry into the workforce and higher education. While the majority of these students will drop out after the ninth grade (Alliance for Excellent Education, 2009b), African American and Hispanic students are more likely to drop out of school than their Caucasian counterparts, while Asian students have the lowest dropout rate (Stopping the Dropout Exodus, 2007).

Student dropouts are costly for the individual and for society. According to Alliance For Excellent Education (2009c), “Since almost 90 percent of the fastest-growing and highest-paying jobs require some postsecondary education, having a high school diploma and the skills to succeed in college and the workplace are essential” (para. 1). Suh and Suh (2007) found three primary risk factors for students dropping out prior to their senior year: academic failure, low economic status, and behavioral issues. If students have more than one of these risk factors, their chances of dropping out increase (Suh & Suh, 2007). Students with all three risk factors are considered at-risk of school failure, including dropping out of school, which is evidence for the need for schools to develop a tracking program and data analysis system to identify at-risk students early (Suh & Suh, 2007). If these systems are in place, interventions can be implemented as a deterrent to dropping out of school (Sparks, Johnson, & Akos, 2010).



Educators and parents should strive to ensure students stay enrolled in school because the consequences for students dropping out of school are many. Adults who do not have a high school diploma or general educational development equivalence certificate (GED) make up three quarters of the state prison population (Harlow, 2003). High school dropouts are unemployed at a higher rate than graduates; they receive more public help, are prone to divorce, are more likely to be single parents, and their children are more likely to drop out of high school (Bridgeland et al., 2006). The problem of high school dropouts persists and has an impact on the economy. According to Monrad, 2007, every year students drop out of high school, Americans pay over \$8 billion in imprisonment costs, and over \$26 billion in taxes are lost every year from over 23 million dropouts. On average, a high school dropout's take home pay is approximately \$9,000 less per year than a high school graduate's (Bridgeland et al., 2006). This averages to an approximately \$1 million lifetime earning difference between a high school graduate and high school dropout (Bridgeland et al., 2006). Dropouts pose economic and social problems, such as increased unemployment, crime, and prison population numbers.

According to researchers, historically, students waited until they were between their 11th and 12th grade years to drop out of high school (Barton, 2006). New research shows that students are dropping out earlier in 2010, between their 9th- and 10th-grade years (Barton, 2006). According to Barton (2006), research has shown that in 2000, a large number of 9th graders were repeating their 9th-grade year (Barton, 2006). This change in the enrollment and retention of 9th graders was attributed to an increase in dropout numbers in the early high school grades (Barton, 2006).

In 2003 approximately 3.5 million youth's ages 16 to 24 failed to earn a high school diploma or were not registered in an official high school or education program (Bridgeland et al., 2006). On average, males graduate high school at a rate slightly lower than female students (Bridgeland et al., 2006). According to Stopping the Dropout Exodus (2007), 11% of males and 8% of females dropped out of high school in 2005.

Once young adults decide to drop out of the educational system, they can take advantage of second-chance opportunities. One second-chance opportunity is the general education development (GED) exam (Bridgeland et al., 2006). Adults who do not complete their high school education have a second chance to earn a high school equivalency certificate with the GED program. Students are tested at the skills and knowledge level equivalent to a high school student (GED Testing Fact Sheet, 2010). The GED is used to assess students' abilities in mathematics, science, reading, history, and writing (GED Testing Fact Sheet, 2010).

Another second chance opportunity offered in Missouri is the Missouri options program. The young adults enrolled in this program prepare for the GED exam while fulfilling a number of other course requirements developed by members of the State of Missouri (MODESE, 2009b). During the 2010 school year, the requirements for the Missouri Options Program were changed; previously, students were only required to take and pass the general education development test, a half credit of an American government class, and pass both the U.S. and Missouri Constitution test (MODESE, 2009b; Parkway School District, n.d.). Students in the cohort class of 2010 are now required to take a half credit of personal finance and a half credit of health along with an

American government class, the Missouri and U.S. Constitution test, and pass the GED test (MODESE, 2009b; Parkway School District, n.d.).

The teachers of the Missouri Options Program work with young adults who possess the ability to fulfill the Missouri high school graduation requirements but who are deficient in the credits required to earn a diploma with their cohort class. These students are in danger of leaving high school without receiving their high school diploma (MODESE, 2009b). “The program specifically, targets those students who are 17 years of age or older and are at least one year behind their cohort group or for other significant reasons identified in the local The Missouri Option Program plan” (MODESE, 2009b, para. 2). Upon completion of the program, students receive an alternative high school diploma from the accredited school districts (Parkway School District, n.d.). Officials in a number of states, including Florida, Indiana, Louisiana, Mississippi, and South Carolina offer the options program and offer students either a high school diploma or an alternative high school credential upon passing all five components of the GED exam and the other program requirements (Southeast Comprehensive Center, 2008).

As a result of inaccurate recordkeeping of enrollment and dropout rates in a number of states, the true number of students who leave school early without their high school diploma is unknown (Bridgeland et al., 2006). Numbers are difficult to maintain because of the way dropouts are categorized (Bridgeland et al., 2006). For example, students enrolled in a GED program are not counted as dropouts, and high school-aged individuals who are imprisoned are commonly reported to have transferred rather than dropped out (Bridgeland et al., 2006). State officials reporting under these conditions report

inaccurate dropout numbers (Bridgeland et al., 2006). However, the “GED Testing Service has established strict guidelines for the program so that GED Option would not become an incentive to leave secondary school early or a way to circumvent jurisdictional policies pertaining to the K–12 system” (American Council on Education (ACE), 2009, p. 3).

The NCES provides the nation’s most commonly cited dropout and school completion statistics. Using primarily two data sources, the Current Population Survey (CPS) and the Common Core of Data (CCD), the NCES provides four different statistics: event dropout rate, status dropout rate, status completion rate, and averaged freshman graduation rate (Tyler, & Lofstrom, 2009, p. 78).

Bracey (2006) explored four graduation-rate studies conducted during the 1988 school year. A census survey revealed an 80% graduation rate; the CPS showed an 83% graduation rate; the Green and Winters survey, which utilized CCD, revealed a 70% graduation rate; and the Swanson survey, which also utilized CCD, demonstrated a 68% graduation rate. Tyler and Lofstrom (2009) reported discrepancies in the dropout reporting system, caused by the practice in some states of counting GED certificate students as high school graduates rather than dropouts. The American Council on Education reports (2009), “Cohort graduation rates for states ranged from 4.5 percent (Tennessee) to 27.6 percent (Missouri)” (p. 26).

Following the introduction of the No Child Left Behind Act (NCLB), (NCLB, 2003) in 2002, there has been more pressure from the government officials to increase

high school graduation rates and lower dropout rates (Swanson, & Chaplin, 2003). NCLB is an accountability tool that is used to ensure that all students are academically successful by 2014 (NCLB, 2003). Primary performance indicators for elementary and middle schools are the equivalent of state-mandated test scores and are utilized to compute adequate yearly performance (AYP) scores (NCLB, 2003; Swanson, & Chaplin, 2003). The additional indicator for elementary and middle schools is the attendance percentage ratio (Swanson, & Chaplin, 2003). High school administrators must incorporate an additional indicator related to the graduation percentages, which ensures that students attend school and earn credits the state and district require for graduation (Chaplin & Swanson, 2003).

Because of the pressures of the state-directed testing series and the consequences that officials in districts and schools face for not achieving AYP for two consecutive years, there are concerns that some high school administrators may push failing and at-risk students out of the system to increase overall test scores (Swanson, 2004). In doing so, administrators avoid federal government sanctions imposed on schools that do not meet AYP goals for two consecutive years (Swanson, 2004a). Students who graduate high school are less likely to drop out of college than individuals with a GED (Cameron & Heckman, 1993). This mean labor market position of high school dropouts is similar to that of GED-certificated students; therefore, high school dropouts will have difficulty finding meaningful employment (Cameron & Heckman, 1993). Swanson (2004) reported that “weak federal regulations on graduation accountability have opened a door that permits states to opt for a lower road” (p. 3).

Earning a high school diploma and a GED has distinct differences and outcomes in the educational world and labor market (Tyler & Lofstrom, 2009). This makes earning the GED different from earning a high school diploma. In terms of the labor market, students who earn a GED certificate earn a considerable amount less than high school graduates (Barton, 2006; Tyler & Lofstrom, 2009). GED holders also fail to attend postsecondary education as often as high school graduates (Tyler & Lofstrom, 2009). Therefore, it appears to be unreasonable to count GED holders as high school graduates in certified educational achievement data (Tyler & Lofstrom, 2009).

In existing literature, researchers described the decision to leave school early as a lengthy progression of detachment and offered a number of explanations and causes for the disconnection (Bridgeland et al., 2006; Shu & Shu, 2007). The detachment is both academically motivated and socially motivated and is based on the students' perceived school expectations for themselves and the knowledge they acquired in school (Bridgeland et al., 2006). These students may start showing warning signs of being at-risk of dropping out up to 3 years prior to the occurrence of dropping out and may even show signs as early as elementary school (Bridgeland et al., 2006). One of the significant indicators that provide severe warning signs of a future dropout is a student's absentee rate; other signs include low grades, discipline problems, low reading levels, retention, and lack of school involvement (Bridgeland et al., 2006). Other indicators are associated with family and personal education experiences. Students who drop out as a result of family factors often enter the school system less prepared to begin school (Barton, 2006).

They are normally from low-income, single-parent families and have uneducated parents who also dropped out of high school (Barton, 2006). Individual factors include low grades, absenteeism, disciplinary problems, retention, drugs, alcohol, pregnancy, and criminal activity (Barton, 2006).

According to educators and school policy makers, if alternative choices such as smaller class sizes, online classes, homeschooling, and alternative schools are made available to at-risk students, the likelihood of failure will lessen, and their chances for academic success will greatly improve (Leiding, 2008). Marian Wright Edelman (2010) wrote, “we don’t have a moment to wait or a child to waste” (para. 26). At-risk students are unsuccessful in traditional school settings that utilize outdated and ineffective teaching practices, methodologies, and strategies.

The dropout data shown in the Green report (2002) included the following results: “The national graduation rate for the class of 1998 was 71%. For white students the rate was 78%, while it was 56% for African-American students and 54% for Latino students” (para. 9). Honawar (2004) reported that 43% of Hispanics not born in the United States have a higher likelihood of dropping out than Hispanics who are born in the United States. The reason for the disparity in higher dropout rates for Hispanics and African Americans is the lack of English-speaking ability in Hispanics and the socioeconomic gap of African Americans (Honawar, 2004).

Conventional school administrators are not meeting the needs of a large number of students (Leiding, 2008). Bridgeland et al., (2009) found that students reported a number of reasons for leaving school early, ranging from boredom, uninspired teachers,

lack of academic expectations, and real-world events. On the other hand, teachers and administrators believed students dropped out due to a lack of parental involvement, absenteeism, and being academically prepared as they reached high school (Bridgeland et al., 2009). “Great schools learn to treat each student differently, rather than demanding that all students fit into the ‘one size fits all’ format of schooling that is widely used today” (Bridgeland et al., 2006, p. 14). A number of at-risk students have failed to finish school because of the lack of alternatives offered by district officials (De La Rosa, 1998). As a result, the requirements for alternative instruction, such as charter schools, home schooling, virtual schools, online classes, and alternative schools will continue to play a role in education until administrators at traditional schools offer students the individualized learning needed to be successful (De La Rosa, 1998; Leiding, 2008). This effort should decrease the dropout rate and increase average graduation percentages (De La Rosa, 1998).

### *Absenteeism*

Attendance is defined as times of being present (Strickland, 1998). According to Strickland (1998), an indicator of a student’s success in the classroom is attendance; therefore, constant absenteeism in public high school students is the foremost indicator of grade achievement (Strickland, 1998). According to Bridgeland et al. (2006), the earliest a student can drop out of school is at 16 years of age. However, Missouri’s compulsory attendance law statute 167.031, RSMo, indicates:

That any parent, guardian or other person having custody or control of a child between the ages of seven (7) and the compulsory attendance age for the district,



must ensure that the child is enrolled in and regularly attends public, private, parochial school, home school, or a combination of schools for the full term of the school year. The term Compulsory Attendance age for the district shall mean seventeen (17) years of age or having successfully completed sixteen (16) credits towards high school graduation in all other cases. (Missouri Department of Secondary & Elementary Education [MODESE], 2009a, para. 1, para. 2)

### *Technology*

Students who fail in traditional school settings face challenges as they get to high school (Buffum et al, 2009). These students have a higher likelihood of dropping out, ending up in prison, and earning less money than high school graduates (Buffum et al, 2009). Conventional schools fail to teach all students because their method for learning predominantly ensures this result (Buffum et al., 2009). Traditional schools have failed to change to meet the needs of the new generation of students. Technology is empowering 21st-century students to explore, participate, and use authentic learning to expand their learning opportunities (Lemke & Coughlin, 2009). In the 21st century students are digitally wired; therefore, teaching at-risk students through the “sit and get” direct instructional model has become obsolete (Lemke & Coughlin, 2009). Online learning is used to give at-risk students who are digitally wired and technologically savvy an opportunity to actively participate in their learning (Lemke & Coughlin, 2009). With appropriate implementation, online learning may be helpful in keeping high school students engaged in the curriculum and decreasing the dropout rate (Lemke & Coughlin, 2009). Use of technology also enables the teachers to engage students and hold their

interest throughout the curriculum (Slaughter, 2009). Teachers who can think outside the box and who are innovative with their instructional strategies and delivery methods can enhance student learning and desire to succeed, therefore reducing the dropout rate (Slaughter, 2009).

### *Statement of the Problem*

In a typical school year, many students are not successful in conventional school settings (Barton, 2006). Student failures may result in the student dropping out of school before graduation. Students have found that alternative programs provide a unique pathway for reaching their graduation goals. With the passage of NCLB, high school administrators have been forced to improve academic achievement levels to reach adequate yearly progress, along with the additional indicator of improving the graduation rate (Hall, 2005; NCLB, 2003; Swanson & Chaplin, 2003). Delisio (2003), mentions how NCLB will impact the dropout rate,

We believe that high-stakes testing -- and the resulting retentions -- will cause the dropout problem to increase by 50 percent in the next five years. If that takes place, it won't be only students who are at risk -- it will be society (Delisio, 2003, p. 3).

Teachers find themselves deciding whether to spend valuable classroom time helping students who are lagging behind or to move ahead quickly just to get through the curriculum (Christensen et al., 2008). Because of NCLB, there are additional pressures to meet academic achievement levels; the perception is that teachers have to get through the district curriculum (Christensen et al., 2008).

Federal government officials have also developed legislation in the implementation of NCLB, besides having to meet AYP; schools are graded on additional indicators (Hall, 2005, Swanson & Chaplin, 2003). Elementary and middle schools are graded on the rate at which students attend school, while high schools are graded on graduation rates (Hall, 2005; Swanson, 2004). Elementary and middle schools work to develop students' attendance patterns prior to the students' move to high school. The enactment of NCLB has caused high school administrators to raise the standards in academics and graduation rates (Anderson, 2005; Swanson, 2004). School administrators must work to develop solutions to reach or exceed academic achievement levels and increase graduation rates to attain AYP (Anderson, 2005; NCLB, 2003; Swanson & Chaplin, 2003). Teachers need to find a way to engage at-risk students to achieve academically, attend school regularly, and ultimately graduate. This suggests that traditional school settings may not be best for at-risk students. Alternatives need to be implemented to keep these students in the classroom and engaged in school.

#### *Purpose of the Study*

The purpose of the study was to examine whether instituting the A+LS online instruction for at-risk students in an alternative high school can be used to increase student achievement at a higher percentage rate than in an alternative high school utilizing direct instruction. One reason for the study was to determine if the A+LS online instruction was a motivational tool for students and if it could be used to increase students' overall attendance percentages, as measured by the ratio of hours present to total hours possible while decreasing the alternative school's dropout rate. The study was

used to compare data gathered from the 2008–2009 school year, during which students were taught using direct instruction to data gathered from the 2009–2010 school year, during which the A+LS, using online instruction, was implemented for the core academic courses.

### *Research Question and Hypotheses*

In the qualitative research, both teacher and student perceptions were considered.

The major qualitative questions were as follows:

**RQ 1.** What impact do the students and teachers think the implementation of A+LS has on the alternative school environment?

**RQ 2.** What impact did the implementation of the A+LS have on student achievement, student attendance, and the alternative school dropout rate?

**RQ 3.** Do students and teachers perceive the A+LS curriculum to be challenging and rigorous enough for the students? Did the online curriculum prepare the students for the future?

**H<sub>1</sub>.** Implementation of the A+LS through the use of online instruction with at-risk students in an alternative high school will increase academic achievement, as measured by a comparison of the number of course credits earned before implementation to the number of course credits earned after implementation.

**H<sub>01</sub>.** Implementation of the A+LS online instruction with at-risk students in an alternative high school will not result in an increase in academic achievement as measured by a comparison of the number of course credits earned before implementation to the number of course credits earned after implementation.

**H<sub>2</sub>.** Implementation of the A+LS online instruction with at-risk students in an alternative high school will result in an increase in student attendance rate, as measured by a comparison of the attendance rate before implementation to the attendance rate after implementation.

**H<sub>02</sub>.** Implementation of the A+LS online instruction with at-risk students in an alternative high school will not result in an increase in student attendance rate, as measured by a comparison of the student attendance rate before to the student attendance rate after implementation.

**H<sub>3</sub>.** Implementation of the A+LS online instruction with at-risk students in an alternative high school will decrease the dropout rate at the alternative school as measured by a comparison of the dropout rate before to the dropout rate after implementation.

**H<sub>03</sub>.** Implementation of the A+LS online instruction with at-risk students in an alternative high school will not result in a decrease in the dropout rate at the alternative school as measured by a comparison of the dropout rate before implementation to the dropout rate after implementation.

**H<sub>4</sub>.** Implementation of the A+LS with at-risk students in an alternative high school will cause an increase in the amount of early graduation applications, as measured by a comparison of the early graduation applications prior to the implementation of the A+LS.

**H<sub>04</sub>.** Implementation of the A+LS with at-risk students in an alternative high school will not cause an increase in the amount of early graduation applications, as

measured by a comparison of the early graduation applications prior to the implementation of the A+LS.

A mixed methods approach was used to explore the research questions. A sample of 45 students was gathered from an alternative high school where the A+LS program was implemented during the 2009–2010 school year. The researcher gathered academic achievement, dropout, and attendance data from the district to utilize in the quantitative analysis. Information on student and teacher perceptions was gathered using surveys and interviews. The researcher utilized the information to determine the effects of the program on student achievement, attendance, and lowering the dropout rate.

#### *Definition of Terms*

*A+nyWhere Learning System (A+LS):* The A+LS is an online learning curriculum offered to support K-12 and adult learners (American Education Corporation, 2006). The A+LS offers an extensive curriculum from credit recovery to college prep courses (American Education Corporation, 2006). The program also has a variety of assessments to ensure students have learned and retained information (American Education Corporation, 2006). The A+LS is aligned with state standards to allow school districts to continue to meet state and district requirements (American Education Corporation, 2006).

*Absenteeism:* “Periods of not being in attendance” (Strickland, 1998, p. 3).

*Alternative education:* “A separate program within a K-12 public school district or charter school established to serve and provide youth a choice or option whose needs are not being met in the traditional school setting.” (Michigan Department of Education, 2011, para.1).

*At-risk:* Children have been defined as “at-risk” with a variety of different indicators, including limited reading skills, experiencing abuse or trauma, disability or sickness, or demonstrate behavior problems. Measures of family risk include poverty, an inferior level of parental schooling, an increased number of kids in the family, a single parent, welfare reliance, family dysfunction, abuse, parental mental illness, parental substance abuse, and family conflict or other complaints. Measures of community risk might include rates of poverty, criminal activity, joblessness, or teen pregnancy or parenthood within the community (Moore, 2006).

*Average freshman (9th-grade) graduation rate:* The average freshman (9th grade) graduation rate is the number of high school students who complete their high school’s graduation requirements 4 years after starting the 9th grade and graduate with their cohort class (Tyler & Lofstrom, 2009). These statistics are measured by utilizing core common data. Students who successfully complete the GED program are not counted in this graduation rate (Tyler & Lofstrom, 2009).

*Annual yearly progress (AYP):* AYP is the tool used to determine whether public schools and school districts meet the academic targets established by individual states (NCLB, 2003). The AYP guidelines are used to establish the base level of student achievement levels schools are projected to make annually according to the accountability system directed by NCLB (NCLB, 2003). Administrators at schools and school districts must show constant and considerable improvement towards the state’s standards on a yearly basis. The projected outcome by 2014 is that all students meet the state standards in mathematics and reading (NCLB, 2003).

*Cohort group:* A cohort class begins when a student begins kindergarten and not high school (MODESE, 2009).

*Compulsory attendance:*

Statute 167.031, RSMo, indicates that any parent, guardian, or other person having custody or control of a child between the ages of seven (7) and the compulsory attendance age for the district, must ensure that the child is enrolled in and regularly attends public, private, parochial school, home school or a combination of schools for the full term of the school year (MODESE, 2009, para. 1).

The term ‘compulsory attendance age for the district’ shall mean seventeen (17) years of age or having successfully completed sixteen (16) credits towards high school graduation in all other cases (MODESE, 2009, para. 2).

Children between the ages of five (5) and seven (7) are not required to be enrolled in school. However, if they are enrolled in a public school their parent, guardian or custodian must ensure that they regularly attend. (MODESE, 2009, para. 3)

*Direct instruction:* Direct instruction (DI) is a form of instruction that is used to bring attention to clearly organized and carefully planned lessons based on small learning increments and clearly defined instructional tasks (Engelman & Becker, n.d.). Direct instruction is based in research and theory, giving understandable instruction, and removing misinterpretations that can greatly improve and increase achievement (Engelman & Becker, n.d.).



*Drop-out:* According to the officials at the National Center for Education Statistics (NCES), a dropout is an individual who:

1. Was enrolled in school at some time during the previous school year;
2. Was not enrolled at the beginning of the current school year;
3. Has not graduated from high school or completed a state- or district-approved education program;
4. Does not meet any of the following exclusionary conditions: transfer to another public school district, private school, or state- or district-approved education program; temporary absence due to suspension or school-approved illness; or death. (Stillwell, 2010, p. 24)

*E-Learning:*

eLearning is a catch-all term that covers a wide range of instructional material that can be delivered on a CD-ROM or DVD, over a local area network (LAN), or on the Internet. It includes Computer-Based Training (CBT), Web-Based Training (WBT), Electronic Performance Support Systems (EPSS), distance or online learning and online tutorials. The major advantage to students is its easy access. There are some typical elements and a standard approach to developing or authoring eLearning material (Kurtus, 2004, para 1).

*Event dropout:* These individuals are between the ages of 15 and 24 (Tyler & Lofstrom, 2009). Event dropouts are the students who drop out sometime during their sophomore or senior year of high school (Tyler & Lofstrom, 2009). The statistics are measured

using the current population survey (Tyler & Lofstrom, 2009). The students enrolled who successfully completed the GED program are not counted as leaving school early (Tyler & Lofstrom, 2009).

*Graduation rate:* Graduation rate is the number that represents the individuals who successfully obtained a high school diploma from an accredited high school in a four-year period (Swanson & Chaplin, 2003). According to the officials at the NCES (2007), the formula for graduation rate incorporates

This rate does not include those students who are still enrolled. The rate incorporates 4 years' worth of data and thus is an estimated cohort rate. It is calculated by dividing the number of high school completers by the sum of dropouts for grades 9 through 12, respectively, in consecutive years, plus the number of completers (Kaufman et al., 2004, p. 62).

*General Education Development test (GED):* The GED program is used to offer young adults who did not finish high school a chance to finish a high school equivalency program (GED Testing Fact Sheet, 2010). This program is used to offer young adults an opportunity to show they have attained high school academic skills needed to attain a GED certificate (GED Testing Fact Sheet, 2010).

*No Child Left Behind (NCLB):* "To close the achievement gap with accountability, flexibility, and choice, so that no child is left behind" (NCLB, 2003).

*Response to interventions (RTI):* RTI is a program designed to provide high quality education and interventions matched to the student's individual needs (Buffum et al.,

2009). The program is used to monitor students to instill changes made in a timely manner with the student's education or goals (Buffum et al., 2009).

*Status dropout rate:* The Status dropout rate incorporates individuals aged between 16 and 24 who have not enrolled in high school and have not received their high school diploma. The dropout rate utilizes the current population survey. Individuals enrolled who have obtained their GED certificates are included as graduates in this dropout rate (Tyler & Lofstrom, 2009).

*Status completion rate:* These individuals are between the ages of 18 and 24 (Tyler & Lofstrom, 2009). These students left school early but later returned and have earned a high school diploma. This dropout rate is measured by utilizing the current population survey (Tyler & Lofstrom, 2009). The status completion rate includes students who successfully complete the GED program and earn their certificate (Tyler & Lofstrom, 2009).

*Truancy:* Truancy includes every unexcused absence from school. Truancy is considered a crime committed by individuals under the age of 17; this would not be considered a crime an adult could commit. Therefore, truancy is considered a status offence (NCES, n.d.).

#### *Limitations of the Study*

This was the first year that the alternative high school officials implemented the A+LS program. All of the core academic classes, mathematics, English, science, and history, were offered through the online learning system. The students who attended the alternative high school in 2009 were accustomed to the traditional style of teaching.

Teachers utilized similar modalities and teaching styles to teach all of the students during direct instruction. During the 2008-2009 school year the student's experienced an administrative change, this was considered one of the limitations of the study. A number of teachers had also voluntarily transferred to other schools in the district after the 2008-2009 school year. The district also decreased their administrative staff at the alternative school by one administrator and eliminated three teaching positions. Therefore, during the implementation of the A+LS, the researcher utilized interviews with the students and staff to ensure the changes were due to the implementation of A+LS rather than the new staff. Other limitations included the timeline of the study, which was conducted over a 1 year period. Other limitations included the fact that the research was conducted in an alternative high school with a relatively small student population. There was also a new administrative team implementing the A+LS program, and a number of the students earned extra academic credits and applied for early graduation and were, therefore, unavailable to take part in the study. These students were no longer attending the alternative high school.

#### *Background of the Researcher*

The researcher had experience teaching in middle schools and administrative experiences in both alternative high schools, and a Title I elementary school. At the middle school level, the researcher taught 6<sup>th</sup>-, 7<sup>th</sup>-, and 8<sup>th</sup>-grade health and physical education. After finishing a master's degree in educational administration, and moving on to the district's alternative high school as the dean of students, the researcher witnessed the frustrations of at-risk students during direct instruction. The researcher

worked with students on their attendance issues, devised academic intervention time for struggling students, and revamped the Missouri Options Program. The researcher has since moved to a Title 1 at-risk elementary school. At the time of this study, the researcher was not working at the alternative high school.

### *Summary*

With the implementation of NCLB, the importance of graduation rates and dropout rates has increased for all school districts (Hall, 2007; NCLB, 2003). According to Swanson and Chaplin (2003), even though assessment scores are required to be the primary achievement determinant at every instructional level, the definition of AYP has come to include an additional gauge of instructional achievement. At the secondary level, the additional indicator is graduation rates (Swanson & Chaplin, 2003).

School district officials should be finding alternatives to keep the at-risk population engaged in school until they graduate. Alternative interventions, such as the development of alternative schools, can provide solutions to helping secondary schools attain their additional AYP indicator. According to Dounay (2006), reasons that students drop out of school include boredom, lack of motivation, lack of inspiration, failure to connect learning to the “real world,” and a need for better teaching. Teachers need to ensure that they challenge these students to keep them inspired and involved with the goal of successful graduation.

Utilizing technology in the classroom can connect students to the real world through individualized and authentic learning (Slaughter, 2009). This can also motivate students to learn through the personalized and individualized attention received from the

teacher (Christen, 2009; Slaughter, 2009). Students are prepared for the 21st century; they utilize technology on a daily basis through the use of cell phones, computers, text messages, and social networking (Slaughter, 2009). Teachers are encouraged to teach to the strengths of the students and find what students enjoy. The use of technology is advancing at a rapid rate with the introduction of podcasts, social networking sites such as Twitter, Facebook, iPods, and YouTube, and the expansion of the Internet. Students are now able to access up-to-date information anywhere and anytime.

Chapter 1 included background information on the importance of alternative schools and how these schools help increase graduation rates and lower dropout rates. Chapter 1 also included an introduction to the study, the purpose of the study, the research questions, hypotheses, statement of the problem, definition of terms and limitations. Chapter 2 is a review the existing research regarding dropouts, alternative schools, online learning, the A+LS, at-risk students, student attendance, and school climate. In Chapter 3 the study's design and methodology will be presented and explained. An analysis and interpretation of the data collected will be presented in Chapter 4. Research will be reported by providing findings directly related to the primary and secondary research questions and hypotheses in a table and figure format. The qualitative research will be reported through a discussion format of the themes that emerged from the analysis. In Chapter 5 the summary, conclusions, and recommendations of the mixed study will be presented.

## Chapter Two: Literature Review

In the research study, the researcher explored what, if any, relationship exists between performance in online courses and academic achievement in at-risk high school students. The researcher hoped that the results of the study would lead to the identification of and reasons for the lack of student success in high school and provide a motivational tool to increase students' success rates in high school. In the literature review, the researcher explored the high school dropout rate and the alternatives available for students considered at-risk of failure or dropping out of high school. The literature review also included the implementation of the A+LS and online learning as an effective intervention strategy for at-risk high school students. The literature review will be used to provide the justification and rationale for this study. In the literature review the most recent research on student attendance, at-risk students, educational options for student's success, such as interventions, teacher training, school climate, online learning, A+LS, the dropout problem, and alternative schools, will be discussed.

State laws require children to attend school. Achieving a high school diploma is the goal at the end of the k–12 educational journey, although nearly one third of high school students do not achieve this goal (Barton, 2006). In the research the researcher attempted to find a successful educational avenue for students to earn their academic credits and achieve their high school diploma.

### *History of Public High School Education*

Public education has been around since the 16th century, when education focused mainly on religion (Thatti, n.d.). According to Jacobs (2010), by the late 1800s,

educators across the United States understood that education had to be standardized. During the 19th century public education became formalized with the help of the “common-school reformers” (Thatti, n.d.). The common-school reformers elicited the public’s help and argued public education for all children would lower the crime rate, decrease poverty, and develop an improved and high-quality society (Thatti, n.d.).

During the 1800s teachers were accustomed to customizing their instruction to be in line with the way in which their classrooms were arranged. Teachers had students from all age groups, academic achievement levels, and abilities within the one room school building (Christensen, Horn, & Johnson, 2008). During the annual meeting in 1892 of the National Education Association, a committee of 10 members was elected to develop a report of educational recommendations (Jacobs, 2010). Approximately 5% of American young people attended high school during the post-Civil War period. In the early 1800s education was only available to the children of the wealthiest citizens (Thattai, n.d). Education was not available to all children until the common school reformers of the 1800s proposed and began offering elementary education to all children (Thattai, n.d). During the 1880s enrollment of high school students increased at a rapid pace, to the point that the committee decided to make changes to the educational system (Mirel, 2006). The committee members found that this was a difficult time for education due to the number of opposing perspectives on curriculum, the differing approaches that should be taken to arrange schools, and the differences in pedagogies (Jacobs, 2010). One change the committee members agreed upon was that education should be split into 8 years of elementary and 4 years of secondary school; it was also agreed that students



would be taught the same curriculum at the same pace, no matter what the student's career goal (Jacobs, 2010). Once the school system experienced an increase in enrollment, the schoolhouse administrators changed to the present system; teachers could do a better job teaching one subject or grade level (Christensen et al., 2008). Teachers would teach the same students all day, all semester, at the same pace, at the same tempo, all in the same classroom (Christensen et al., 2008).

The decision was made by the Committee of Ten that every high school student should learn and pursue a college preparatory program of study (Mirel, 2006). During the industrial revolution, schools were designed to teach students how to work mass production; the emphasis was that children would be taught how to work in factories and pursue this career path once they finished school (History of Education, 2008). The committee members also finalized the school calendar, which consisted of children going to school for 6 hours a day, 5 days a week, or for 180 hours a year (Jacobs, 2010). Some 19th-century education decisions are still in effect during the 21st century, despite being formulated during the industrial and economic expansion years (Jacobs, 2010).

In the middle of this demographic revolution, in 1918, another NEA group, this one called the Commission on the Reorganization of Secondary Education, issued a manifesto that turned the fundamental belief of the Committee of Ten on its head. It called for expanded and differentiated high-school programs, which it believed would more effectively serve the new and diverse high-school student population (Mirel, 2006, p. 15).

The commission members thought it was counterproductive to make all high school students pursue a college-preparatory program due to the number of new and diverse high school students entering and attending the school system (Mirel, 2006). They believed continuing with the college-preparatory curriculum would force students to leave school early, which was counter to the country's expectations of high school students (Mirel, 2006). One hundred years ago adolescents were not expected to graduate from high school; therefore, only a handful of students at the turn of the 19th century had attended high school and graduated (Dorn, 1996). The Cardinal Principles team suggested an innovative advancement toward high school that offered students a variety of curricular choices but accomplished the same goal; a high school diploma (Mirel, 2006). In 1895 school officials offered approximately 18 courses, and by the mid-1930s high school officials were offering approximately 200 courses (Wraga, 2000).

By the 1920s administrators at most big-city high schools had developed four tracks that high school students could follow: college preparatory, commercial, vocational, and a general (Mirel, 2006). However, even though there were four tracks, most students were still predominantly enrolled in the traditional core academic courses, and less than 17% of American high school students graduated from high school (Mirel, 2006). The Cardinal Principle proposal included recommendations to reorganize education to ensure all students were encouraged to stay in school until they reached 18 or until they graduated. This could be on a permanent or part-time basis (Bennett, 1972). Bennett (1972) stated that this recommendation had two stipulations; the needs of the students would have to be met, and the curriculum would have to be altered to meet the

requirements of part-time students. It was also mentioned that the recommendations should meet the needs of students considering dropping out of school prior to graduation or their 18th birthday (Bennett, 1972). However, as the 20th century grew, almost all of the states adopted laws requiring all students to remain in school until their 16th birthday (Thatti, n.d.).

Administrators failed to teach the expertise needed for workplace success, and disregarded the social penalty of modern industrial life. Individuals from both sides of the educational system stated that it was the responsibility of the educational system to teach adolescents the skills necessary for a smooth and successful vocational career (Dorn, 1996). Thatti (n.d.), reported,

In spite of the belief that public education should be available to every child irrespective of race, gender or economic status, this has not happened in reality. Discrimination in schools on the basis of race and gender has always persisted. Girls were not admitted in schools until many years after the establishment of schools, and even then, they were not taught the same subjects as boys (p. 4-5).

Once females entered school, they were more likely to stay in school due to the labor-intensive jobs women could acquire upon graduation. Upon graduation females could obtain clerical positions and jobs in the education field (Dorn, 1996). Meanwhile, young men were required to perform labor-intensive jobs (Dorn, 1996). According to Dorn (1996), there were only a handful of students at the turn of the century that had attended high school and graduated. This was a direct result of the lack of child labor laws, which meant that children were forced to work on farms and in factories. However, There was a

42 percent rise in diplomas awarded to young people age 16 to 19, from over 157,000 to over 223,000 during the years 1994–2000 (Barton, 2006). Thattai (n.d.) stated that from 1900 to 1996 the high school graduation rate increased from 6% to 85%. Dorn (1996) also stated that at the turn of the 20th century approximately 2% of American young adults were enrolled in higher education; when the 20th century concluded more than 60% percent were enrolled in higher education (Thattai, n.d.).

Dorn (1996) completed a quantitative study examining the decennial censuses from 1940 to 1990. In the census study Dorn (1996) found that between the years of 1940 and 1990 the percentage of students aged between 20 and 24 years of age who graduated increased for the Caucasian population from 47.9% to 87.3%. The African American population increased from 12.9% to 75% (Dorn, 1996). Dorn (1996) also discovered that the percentage of Southern African American 15-year-old students who had high school experience had increased from 21% in 1940 to 75% in 1970 (Dorn, 1996). According to Thatti (n.d.), “the education of blacks remained very low until Lincoln issued the Emancipation Proclamation in 1863. The literacy rate that was around 5% in the 1860s rose to 40% in 1890 and by 1910 it was at 70%” (p. 4). Prior to this the African American students were educated by missionaries with the sole purpose of transforming them to Christianity (Thatti, n.d.). “In 1954 the Supreme Court unanimously ruled in *Brown vs. Board of Education of Topeka* that racial segregation in public schools was unconstitutional” (Thatti, n.d.).

As members of American society began to value education, more students spent longer time in school. The high school completion rate in 1870 was less than 5% (Mirel,

2006); in 1920 the completion rate was approximately 20% (Barton, 2006). During the 1920s there was a boost in high school enrollment, and the completion rate started to rise (Barton, 2005). Dorn (1996) gave credit for the increase in high school enrollment and completion rate to the immigration movement and the change in the child labor laws during the 1920s. “The collapse of the national economy, particularly the collapse of the youth labor market, forced a huge number of adolescents back to school. By 1940, 7,123,009 students between the ages of 14 and 17 were in high school” (Mirel, 2006, p. 17). This was more than three-fourths of the potential student population (Mirel, 2006). In the early 1960s the achievement rate hit approximately 50% (Barton, 2006). Barton (2006) stated:

Nationally, after peaking at 77.1 percent in 1969, the rate dropped to 69.9 percent in 2000. From 1990 to 2000, the completion rate declined in all but seven states.

In 10 states, it declined by 8 percentage points or more. (p. 3)

Historically, dropping out of high school prior to graduation had been the norm in American high schools (Shannon & Bylsma, 2006). Being a dropout was not determined to be a social problem until 1960 (Shannon & Bylsma, 2006). “In the 1960s dropouts were frequently described in pejorative terms, i.e., as “deviants” in the context of juvenile delinquency and other adolescent issues.” (Shannon & Bylsma, 2006, p. 2).

In 2002 members of Congress passed the NCLB legislation, in an attempt to increase the level of education and accountability for school districts in the United States (NCLB, 2003). In 2010 the expectation for students is to graduate from high school (Barton, 2006). NCLB mandated that officials in every state had to develop a

performance-based system of accountability to demonstrate improvement towards their high school completion goal (Anderson, 2005; NCLB, 2003; Swanson & Chaplin, 2003; Swanson, 2004).

### *Closing the Achievement Gap*

The conversations generated by NCLB are not expected to cease in the near future, and the pressure to improve test scores is even higher in 2010 than ever before:

Amongst the most ambitious and controversial elements of NCLB stands the requirements that each state will develop a comprehensive plan detailing a strategy by which it will (1) ensure that every student maintains educational proficiency and (2) eliminates achievement gaps between high and low performing groups within 12 years (i.e., by the 2013–2014 school year).

(Swanson & Chaplin, 2003, p. 10)

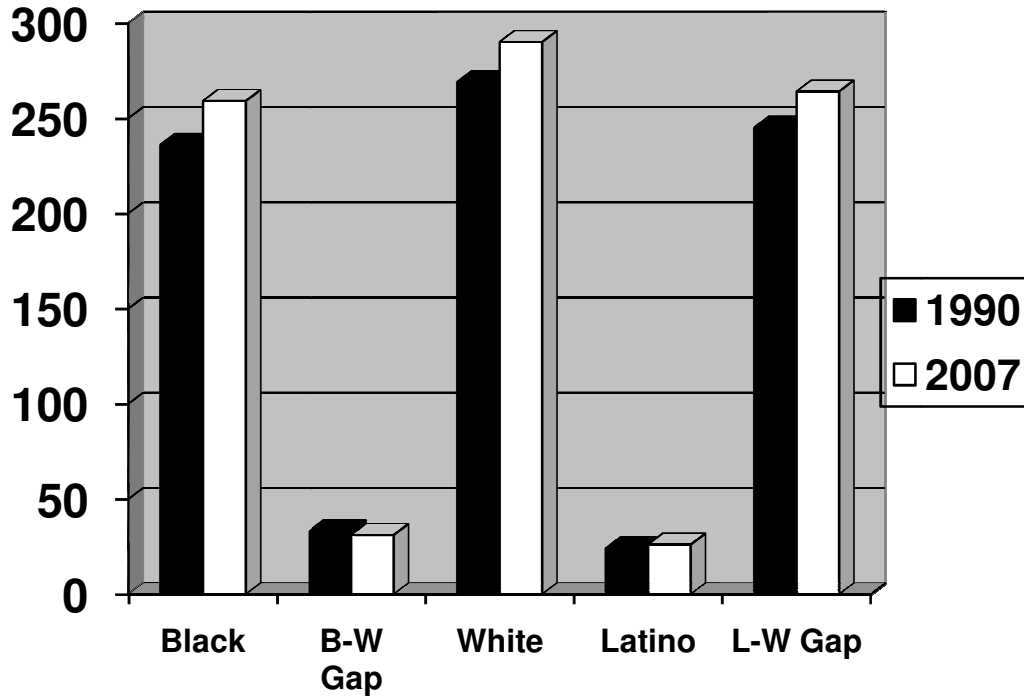
NCLB was developed to ensure states and school district officials meet academic achievement guidelines. States and district officials were given additional indicators on top of the AYP indicators that had to be met (Anderson, 2005; Swanson & Chaplin, 2006; Swanson 2004). Elementary and middle school additional indicators were attendance rates, and high school additional indicators were graduation rates (Swanson, 2004). According to Smink and Reimer (2009), officials in 37 state agencies chose to employ attendance as part of their AYP accounting system. NCLB legislation was developed to emphasize the importance that children attend school because truancy was a serious concern for most school districts (Spencer, 2009). Teachers can now turn their attention to teaching skills, strategies, test scores, and intervention methods, which will

improve academic achievement. The NCLB legislators created requirements for both district officials to reach AYP and ensured district officials looked at ways to close the achievement gap (Anderson, 2005). Annual progress must be shown in every major racial and ethnic group, low income students, free and reduced lunch students, students with disabilities, and students for whom English is a second language (Anderson, 2005; NCLB, 2003; Swanson 2004). According to STATESTATS: Closing the Achievement Gap? (2008), 7 years after NCLB legislation was enacted, the achievement gap had narrowly closed or in some cases even increased.

National Assessment of Academic Progress (NAEP) eighth grade mathematics scores showed an achievement gap still existed between the black and white populations. The figure shows the achievement gap between African Americans, whites and Latinos.

In, 1990, for example, the eighth grade gap in mathematics between whites and African-Americans was 33 points and 24 points between whites and Latinos.

While scores for African-Americans and Latinos have increased over the years-by 23 points and 19 points respectively-the gap in achievement between African-American and whites decreased by a only two points, and the gap between Latinos and whites increased by two points (STATESTATS: Closing the Achievement Gap?, 2008, para. 2)



*Figure 1.* 1990 and 2007 8th-grade mathematics achievement gap between Black, White and Latino demographic groups. The data was acquired from STATESTATS: Closing the Achievement Gap, 2008.

According to authors of STATESTATS: Closing the Achievement Gap? (2008), “every ten point difference on the NAEP test is roughly equivalent to a full grade level of learning” (para. 3). In 2007 the achievement gap had increased in 2007; the deficit in 8<sup>th</sup> grade math had grown to more than three grade levels for African Americans over their Caucasian counterparts (STATESTATS: Closing the Achievement Gap?, 2008).

One of the reasons the achievement gap persists is due to the high stakes testing that has been implemented. The achievement gap will remain as long as teachers are pressured to teach to the test, and are unable to take into account the individual needs of



students (Leiding, 2008). According to Jukes, McCain, and Crocket (2010), during high stakes testing teachers are pressured to employ the teaching techniques they feel most comfortable utilizing to ensure their students perform to the best of their ability on the test. Gulek (2003) reported teachers' classroom instruction is centered on the content they believe will be on the test; therefore, other content is not taught to the students.

While this raise test scores and provides the school with the scores needed to make AYP, it does not develop the student's broader knowledge and skills in all subject areas (Gulek, 2003).

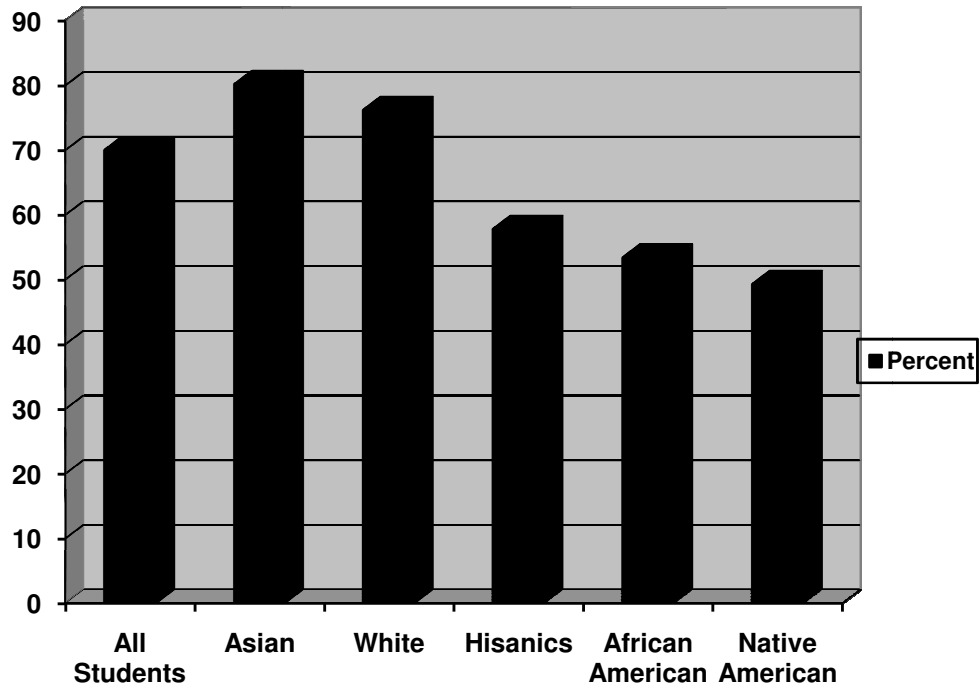
The problem is that the strategies are from the 20th century and do not work with students from the digital generation (Jukes et al., 2010). Jukes et al. (2010) explained that there are two major factors on why the instructor as the expert does not work with today's students (Jukes et al., 2010). First, with the amount of information available to students, is making it impossible for anyone to be an expert in any one field (Jukes et al., 2010). "The sheer volume of new information being generated in the modern world in any field is staggering, making it impossible to be an expert in the traditional meaning of the word" (Jukes et al., 2010, p. 80). Second, lecturing is not an effective strategy with today's students (Jukes et al., 2010). "Research has consistently shown that having students sit and listen to a teacher is one of the least effective ways to teach" (Jukes et al., 2010, p. 80). For teachers to successfully close the achievement gap and work with at-risk students, they need to be professionally trained, taught the importance of instructing at-risk students, taught how to read data, taught data-based decision making skills, employ parents and families in their classrooms and the school community, and revisit

their curriculum to ensure a guaranteed and viable curriculum is being taught (Beecher & Sweeney, 2008).

NCLB required mandatory testing of students throughout the school year. In Missouri, Senate Bill 319 was enacted in 2001. “Senate Bill 319 calls for the early assessment of students’ reading skills and requires school districts to intervene with students who are reading below grade level” (MODESE, 2008, para. 1). The lawmakers require students to be retained in 4th grade if they do not read at or above the 3rd-grade level (MODESE, 2008).

#### *Dropout Prevention Statistics*

The dropout rate is used to calculate the proportion of students who have failed to enroll in high school and who have been unsuccessful at achieving their high school diploma (NCES, 2007). According to Barton (2006), President Bush sought to have the nation’s graduation rate at or above 90% by 2000. The report authors stated that high school achievement scores have been in stable decline over the past two decades (Barton, 2006). There are considerable gaps in graduation rates in the United States of different demographic groups. According to *Alliance for Excellent Education* (2009a), in 2005–2006 national statistics, the African American and Native American demographic groups averaged approximately 50% of graduating high school seniors in comparison to 76% of all students graduating (see Figure 2).



*Figure 2.* Estimated 4-year graduation rate. The data was acquired from Alliance for Excellent Education, 2009a.

“Every 9 seconds, an American student drops out of school” (Chmelynski, 2006, p. 1). Roughly 1.2 million students who enroll as freshmen in high school every year fall short of graduating from high school with their class 4 years after enrolling, which amounts to 7,000 students each day (Alliance for Excellent Education, 2009b). These statistics are alarming for high school administrators as well as local, state, and national legislators. The school system is failing one third of America’s citizens and sending them into the world unprepared for the work force or to receive any further education (Barton, 2006; Neild, Balfanc, & Herzog, 2007). More than 1 million students who begin their high school careers will never finish with a diploma, which averages to 1 out of

every 3 to 4 students entering high school (Barton, 2006; Hall, 2007). Hall (2007) stated that the statistics for African American and Latino populations are worse than those for the general population; only one in every three 9th- to 12th-grade students will graduate with a high school diploma. This is problematic because it is nearly impossible for anyone without a high school diploma to earn a decent income or to become a productive citizen (Neild et al., 2007).

The amount of money a dropout can earn has been decreasing steadily over the last thirty years.

In 1971, male dropouts earned \$35,087 (in 2002 dollars), falling to \$23,903 in 2002, a decline of 35 percent. In the same period, the earnings of female dropouts fell from \$19,888 to \$17,114. Earnings of high school graduates also dropped considerably, but not as much as earnings for those who dropout out of school. (Barton, 2006, p. 5)

The impact on the community is even greater when high school dropouts are unable to secure the jobs and the earning level needed to provide for themselves, their families, and a respectable lifestyle. Individuals who are unable to provide for themselves or their families may turn to a life of crime to supplement their income. According to Monrad (2007), “Approximately 75 percent of state prisons inmates and 59 percent of federal inmates are dropouts. Moreover, dropouts are 3.5 times more likely than high school completers to be imprisoned at some point during their lifetime” (p. 2). Sinclair (1994) reported that 73% of emotional- and behavioral-disorder students who drop out of school are arrested within 3 to 5 years of dropping out compared to 35% of

their regular education counterparts. Sixty-two percent of students with a learning disability are estimated to be incarcerated within 3 to 5 years of dropping out of high school compared to 15% of regular education students (Sinclair, 1994). Research data is used to confirm that students who leave school early are twice as likely to apply for welfare and be unemployed than their counterparts who graduate from high school (Maunual To Combat Truancy, 1996).

The statistics demonstrate that there are high costs for the dropouts and for society (Tyler & Lofstrom, 2009). Individual losses can include lower earning potential, a greater chance of unemployment, and more health issues. The cost to taxpayers includes the cost to house a prisoner at \$51,000 per year (Sinclair, 1994). “Dropouts from the class of 2008 will cost the United States almost \$319 billion in lost wages over their lifetimes” (Alliance for Excellent Education, 2009c, para. 4).

#### *Reasons for Dropping Out*

Romanik and Blazer (1990) conducted a qualitative survey using three groups of students. Samples consisted of 420 dropouts, 447 at-risk students, and 421 regular education students. The researchers discovered that once the dropouts left school their self-esteem improved in environments that provided more encouraging life events. A number of the dropouts interviewed reported they felt a staff member wanted them to leave school prior to them dropping out. A considerable number of the dropouts reported a lack of interest, no active engagement, and failure to find a connection between the curriculum and the real world.

Somers and Piliawsky (2004) found that growing up in poverty, large family units, low levels of family intelligence, decreased self-esteem, and level of parental education all factored into students dropping out of school. The dropout group also reported a lack of rigor in the curriculum and did not like the course selections they were presented with in high school (Somers & Piliawsky, 2004). The researchers stated that the three top reasons students gave for dropping out were not having an interest in school, family and personal troubles, and failing grades (Shannon & Bylsma, 2006; Romanik & Blazer, 1990). Romanik and Blazer (1990) stated that not all of the dropouts interviewed left school early due to poor grades, family problems, or social support. Some left early due to the lack of engagement in school and the school culture (Romanik & Blazer, 1990). According to the research, dropouts lacked a sense of belonging within the school community (Romanik & Blazer, 1990). Due to the lack of belonging and relationships, students may drop out to escape the boredom or hostile, unfriendly atmosphere of the school (Shannon & Bylsma, 2006). Shannon and Bylsma (2006) stated that once students drop out, they feel a sense of relief and control over their lives. Somers and Piliawsky (2004) referenced that teachers caring for, respecting, having high expectations of, and having an interest in students' growth were ways schools can influence change in student behavior and academic achievement.

Shu and Shu (2007) conducted a survey utilizing data from the national longitudinal survey of youth database from the U.S. Department of Labor. The survey consisted of 6,192 students of whom 5,244 completed high school and 948 did not (Shu & Shu, 2007). The rationale of the study was to recognize the factors associated to high

school dropouts and the impact these factors had on the participants dropping out of school (Shu & Shu, 2007). Shu and Shu (2007) discovered early prevention to be a major strategy for ensuring the at-risk students stays in school. It was found that students with a low grade point average had the greatest risk of dropping out of school (Shannon & Bylsma, 2006; Shu & Shu, 2007). Two other risk factors ranked as high as grade point average: socioeconomic issues and behavioral problems (Baker & Sansone, 1988; Shu & Shu, 2007). The researchers concluded that dropout intervention programs should be inclusive of all three dropout risk factors (Baker & Sansone, 1988; Shu & Shu, 2007). The researchers also stated that intervention programs should start early in a child's educational career as soon as one or more of the risk factors are recognized (Shu & Shu, 2007). Shannon and Bylsma, (2006) reported that schools and districts should provide students with high quality educational experiences, this alone will help lower the dropout rate.

Bridgeland et al. (2006) conducted four focus groups that were ethnically and racially diverse; the students ranged in age from 16 to 24 years of age. The researchers conducted 467 interviews in 25 different places, encompassing the suburbs and big and small cities (Bridgeland et al., 2006). The researcher found that the goal of the majority of elementary and middle school students was to graduate high school and attend college (Bridgeland et al., 2006). Romanik & Blazer (1990) interviewed 420 of their participants. They found over 80% of the respondents had parents who expected them to learn a great deal in school (Romanik & Blazer, 1990). The researchers also discovered over 70% of the dropouts parents disagreed with their decision to leave school (Romanik

& Blazer, 1990). Dropping out of high school is a reality for a third of all school-aged students (Barton, 2006). Bridgeland et al. (2006) found a lack of connection to the school setting, students' perceptions of school as uninteresting, feeling that they were not challenged within their educational studies, and real world events were major factors in students' decision to drop out of school (Shannon and Bylsma, 2006). Engel (1994) discovered that besides boredom, students viewed the school setting as antagonistic to other students as well as adults. Students noted incidents with adults and fellow students (Engel, 1994). Traditional schools failed to satisfy the needs of the individuals attending these schools, especially in urban populations (Munoz, 2002).

Bridgeland et al. (2006) noted that students perceived that teachers did not make school interesting and that school was boring. Students also felt that a number of classes were not related to the real world, so they did not see the reason for the school making them take the class (Romanik & Blazer, 1990). Romanik and Blazer discovered that 81% of the dropouts interviewed were dissatisfied with the courses offered at high school. Engel (1994) studied 88 students who were high school dropouts, and found that they were not engaged and found school dull and not motivating. Students also felt teachers had extremely low expectations of their success and wanted them to dropout (Romanik and Blazer, 1990). Bridgeland et al. (2006) found that students had lofty expectations of themselves; however, their teachers had extremely low expectations of the respondents and their academic ability. Therefore, 70% of the 467 ethnically and racially diverse students surveyed did not graduate but were confident they could have graduated under different circumstances.



Romanik and Blazer (1990) found only 58% of the students interviewed believed their teachers encouraged them to learn and succeed in school. The researchers also discovered that learners who completed small amounts or no homework a week amplified their jeopardy of dropping out of school (Bridgeland et al., 2006). Teachers did not expect at-risk students to complete assigned homework and found 80% of their respondents were assigned less than one hour of homework per night (Bridgeland et al., 2006). Vatterot (2010) concluded, “homework shouldn’t be about rote learning. The best kind deepens student understanding and builds essential skills” (p. 10). Students should feel ownership when completing their homework, in order for this to take place homework should be customized to fit the student (Vatterott, 2010). According to Bridgeland et al. (2006), the majority of students felt that they fell behind in their educational studies during their elementary and middle school years due to the lack of foundation needed to properly prepare them to succeed in high school.

Azzam (2007) found a large number of students displayed a lack of motivation, but would have put more effort into their studies if their teachers had demanded more from them (Bridgeland et al., 2006). Seventy percent of the study participants knew they had the potential to finish high school, if they had only put more time and effort into their studies and their teachers had expected more from them (Azzam, 2007). Another crucial factor connected with school let down was the difference between students’ talents and interests and schools’ scholastic programs (Azzam, 2007; Bridgeland et al., 2006). Romanik and Blazer (1990) discovered that three-fourths of the students they interviewed believed the difficulty of the courses was adequate. Delisio (2003) mentions “Dropping

out of school is not an event; it's a process -- and data indicates that that process begins as early as third grade" (p. 1). Therefore, educators should start recognizing students who are having difficulty learning in the elementary school and provide the interventions/remediation needed for success (Delisio, 2002).

Another problem that the experts at the National Association of School Psychologists (NASP) (2003) found to be a possible cause for the school dropout rate was retention. According to NASP (2003) officials, retention has gained momentum over the past 25 years. Furthermore, up to 15% of American school-aged students are retained every year (NASP, 2003). Of these retained students, 30% to 50% have been retained at least once prior to their freshman year in high school (NASP, 2003). Studies have shown that repeating a single grade increases the chance of dropping out by 30% to 50% if a student is retained, and if they repeat twice the chances of dropping out increase to 90% (Sinclair, 1994). Shannon and Bylsma (1996) completed a study of Philadelphia high school students and found student who were retained in 9<sup>th</sup> grade were more likely to drop out prior to finishing high school.

The largest number of students retained originates from poor, minority groups, single family homes, parents who are not involved with their child's education, and most often from the inner cities (NASP, 2003). Retention of students has a definite negative effect. Kenneady (2004), reports "Students who are retained show poor attendance rates, have increased behavior problems, suffer lower self-esteem and view retention as a punishment and a stigma, not a positive event to help their academic performance" (p. 2). Bridgeland et al. (2006) reported students retained did not believe their high school was

doing enough to help them learn. According to NASP (2003) experts, “retained students have increased risks of health-compromising behaviors such as emotional distress, cigarette use, alcohol use, drug abuse, driving while intoxicated, use of alcohol during sexual activity, early onset of sexual activity, suicidal intention, and violent behaviors” (p. 2). Researchers have shown that retention does more harm than good to a student (NASP, 2003). The negative effects of retention range from lowering self-esteem, to a higher percentage of dropouts, more at-risk health behaviors, emotional problems, and more behavioral problems at school (NASP, 2003). Bridgeland et al. (2006) found that 29% of the students interviewed, reported even after being retained, they doubted they could ever attain the knowledge to pass the high school requirements. According to researchers, students who were held back or were late starting kindergarten had a higher likelihood of dropping out of school than students who had never been retained during their educational years (NASP, 2003). According to Smink (2001), state legislators are calling for an increase in school accountability for student academic achievement. Therefore, there is also a mind shift with regards to allowing social promotion and ordered retention for all low achieving students (Smink, 2001).

Dropouts can range from the special education student to the gifted student. According to Sinclair (1994), students with disabilities experience a higher dropout higher rate than students without a disability. Sinclair (1994) reported on a study conducted by Wagener et al. (1992) over a 2 year period who showed students with a diagnosis of emotional and behavioral disability dropped out at a rate of 59% and students with a learning disability diagnosis dropped out at an increased rate of 39%

compared to students without a disability. Hansen and Torso (2007) conducted a qualitative research study relating to gifted dropouts. The researchers utilized four sampling methods to search for participants and located 14 participants, 6 females and 8 males (Hansen & Torso, 2007). During the sampling process, the researchers sought different avenues to locate gifted learners who had dropped out of high school. The researchers requested former teachers, university professors, counselors, and sponsors send statements with the student's intelligence test scores, academic assessment results, and intellectual and emotional qualities often related with gifted students (Hansen & Torso, 2007). "Further, analyses of narratives and test scores from the dropouts themselves showed significantly above average performance (130+ with one submitting an IQ score of 180), sophisticated vocabulary, depth of thought and feelings that correlated highly with gifted students" (Hansen & Torso, 2007, p. 4).

Shannon and Bylsma (1996) found that a number of studies conducted on dropouts, revealed the importance of teacher approach, viewpoint, and actions toward students as an important key to lowering the dropout rate. Hansen and Torso (2007) found that dropouts failed to develop important relationships with teachers or staff members. The dropouts also mentioned the curriculum lacked rigor, and the school failed to identify the students as gifted, and placed them in lower level classes (Hansen and Torso, 2007).

Many of the problems started as early as elementary school. Bridgeland et al. (2006) reported that 45% of their respondents mentioned elementary and middle school did not adequately prepare them for high school. Some of the other reasons that gifted

dropouts gave for leaving school early were lack of respect from teachers and administrators, drug and alcohol abuse, feelings of being alone, lack of community connectivity, issues with authority figures, and disagreement with parents or guardians concerning school issues (Hansen & Torso, 2007). All students need to feel they are valued and respected within the educational setting (Hanson & Torso, 2007; Romanik & Blazer, 1990). Renzulli and Park (2000) discovered that gifted and talented dropouts had low self-esteem due to their wants and needs not being met at the high school.

The students stated that they had a desire to experience rigor within the curriculum; they wanted the teachers to challenge them so they could grow and mature educationally, physically, and emotionally (Hansen & Torso, 2007). Renzulli and Park (2000) through their research found with a majority of the dropouts, their schools did not have a complete or appropriate gifted curriculum. Hanson and Torso (2007) stated that teachers and administrators should work to identify gifted students so that teachers can ensure students are challenged, the curriculum has rigor, and the students remain engaged. The dropouts also mentioned that they felt uncomfortable talking to any of their teachers about personal problems as a result of being disrespected by the adults in the building, including their teachers (Hansen & Torso, 2007; Renzulli & Park, 2000).

Positive student-teacher relationships give all students a positive role model as they are educated in unpredictable environments (Lickona, 1991; Rodriguez, 2005). Teachers and staff should ensure they recognize students' intellectual understanding, have high expectations, and engage and motivate all of their students (Rodriquez, 2005). Educators must ensure they recognize and celebrate students and make sure students

understand they are valued, respected and cared for. In doing so, the teachers pass on a message of hope to their students (Lickona, 1991; Rodriguez, 2005).

Dropouts lacked a connection with their teachers and felt disconnected with their school in general. Teachers should ensure they build a student-teacher relationship, and caring must be demonstrated throughout the school to be successful. Lickona mentions, “When students are part of a caring classroom community, they feel valued as persons. When they are challenged to practice respect and care in their everyday peer relationships, these values begin to become part of their character” (Lickona, 1994, p. 3).

Azzam (2009) stated that a lack of creativity in the school system is the cause of the high dropout rate in both the United States and in industrialized countries. Azzam (2009) stated that the dropout rate in the U.S. is nearing 30%; while, the dropout rate within the African America and Latino populations are closing in on 50%, and close to 80% amongst the Native American population. The problems are with teachers’ failure to invigorate the students and uncover their passions; instead students are “sitting and getting” information (Azzam, 2009; Bridgeland et al., 2006). Azzam (2009) blamed the culture of standardized testing and its counter productivity within the school system. Shannon and Bylsma (1996) reported “some studies suggest that states that have the most severe consequences attached to testing have more dropouts than do states that have low or moderate consequences attached to testing” (p. 34). Educational professionals should remember that all students are in danger of withdrawing from school early, no matter their IQ score, achievement test scores or academic grades (Lange & Sletten, 2002).

*At-Risk Students*

According to the purpose of school and the definition of at-risk (The National At-Risk Education Network (NAREN), n.d.),

Students are placed at-risk when they experience a significant mismatch between their circumstances and needs, and the capacity or willingness of the school to accept, accommodate, and respond to them in a manner that supports and enables their maximum social, emotional and intellectual growth and development (para. 8).

There are a number of indicators that may prompt a student to be labeled at-risk. These characteristics can include, but are not limited to, retention of at least one grade level, academic failure, below reading capabilities, low socioeconomic status, one parent family, other dropouts in the family, incarceration, high family mobility, parenthood, poor attendance, and low school expectation (Watson & Gemin, 2008). The major objective is to identify who is actually at-risk.

There are three groups who are potentially at the center of all definitions: the child, family and the community, school. (Moore, 2006; Watson & Germin, 2008). The child is most often at the center of all definitions of at-risk. Children are seen as being at-risk if they have a learning disability, low self-esteem, or have possibly been abused or neglected (Moore, 2006). Students who become disengaged with their school, teachers, and fellow students are likely to leave school prior to graduation (Watson & Gemin, 2008). The family is the central focal point of a student's life as they are growing up and has a great deal of impact on the student's decisions and the formulation of values

(Moore, 2006). The family can be at-risk with regard to the income level, parental education level, single parent household, and family substance abuse (Moore, 2006). Members of the community also have a role in the child's upbringing (Moore, 2006). The amount of crime and the high school completion rate can have a bearing on decisions that students will make later in life (Moore, 2006).

Researchers have shown that retention does more harm than good to a student (NASP, 2003). The negative effects of retention range from lowering self-esteem, to a higher percentage of dropouts, more at-risk health behaviors, emotional problems, and more behavioral problems at school (NASP, 2003). Students at-risk of failure may exhibit signs or symptoms resembling boredom or lack of motivation when they show a variety of learning problems within their school environment (Rockwell, 2008). The answer is to find techniques, learning styles and modalities, better designed to reach and teach those at-risk students. It is no excuse to accept the effects of socioeconomic differences on students' instruction; rather it is a critical factor in closing the achievement gap (Rothstein, 2008).

#### *Alternatives to Dropping Out*

Interventions exist that can be implemented to deter students from leaving high school prior to graduating with a diploma. The major factors in determining who will drop out are educational performance and a student's connectedness to the school community (Dounay, 2006). The most important areas that educators need to highlight are academics, relationships with teachers and peers, and classroom size to keep at - students in school (Lange & Sletten, 2002).



A number of reasons inform students' decisions to drop out of school, including academics, behavioral issues, personal concerns and academics (Shannon & Bylsma, 2006; De La Rosa, 1998). Therefore, school district officials should develop alternatives to educating at-risk students to improve their chances of success. According to De La Rosa (1998), officials in traditional schools are failing to meet the needs of some students; thus, the request for nontraditional instruction, such as charter schools, home schooling, and alternative schools was necessary and should continue in the future (Leiding, 2008).

#### *Alternative education*

According to Raywid (1999), the first alternative schools appeared in the 1960s primarily in the private school system but later appeared in public schools. Raywid (1999) stated that these alternative schools split into two specific areas urban and suburban locals. Raywid (1999) stated that the population of the urban alternative schools consisted of poor and the minority students; they focused on making the educational process successful for students who had been unsuccessful at their home school. The suburban alternative school administrators were finding new ways to improve education and inventing original ways to educate their students (Raywid, 1999). Once the alternative movement gained momentum, the number of schools soared from 100 to 10,000. In 1993–1994, there were 2606 alternative schools operated separately from traditional schools. The focus of alternative schools in the 1970s was progressive, but many of these schools did not survive (Lange & Slatten 2002). In the 1980s, alternative schools officials shifted to a more conservative approach. The shift was

towards academics and behavior due to the growing number of students who were failing, disruptive or otherwise not meeting educational expectations (Lange & Slatten, 2002).

The rationale of alternative education is defined by officials in each state, but alternative school officials are familiar in how and why each student is referred to the school (Leiding, 2008). Research shows that learners are counseled to attend alternative schools if they are in danger of educational collapse, as demonstrated by not passing academic classes or a lack of credits, attendance issues, disorderly behavior, suspensions, pregnancy, or factors related to premature removal from school (Barton, 2006).

Alternative schools are geared toward students who have been ineffective at traditional schools and are attempting to save at-risk students in the instructional system (Barton, 2006). Foley and Pang (2006) reported alternative schools are aiming to meet the student's academic, social emotional situation all through individualized instruction. These young adults are close to ending their educational careers before successful completion and graduation (Barton, 2006).

Although there is no specific documentation indicating the number and kind of alternative schools in existence in 2010, Leiding (2008) reported that there are in excess of 25,000 alternative programs currently operating within school districts nationwide. Most of these programs are intended to assist at-risk students to become more successful in their academics (Foley & Pang, 2006). Alternative education is an important solution for attaining the goals and desires of at-risk students (Leiding, 2008). Raywid (1994) stated that there are two overarching consistencies regarding alternative education: "they have been designed to respond to a group that appears not to be optimally served by the

regular program, and consequently they have represented varying degrees of departure from standard school organization, programs and environments” (p. 26).

Kim and Taylor (2008) conducted a qualitative research study utilizing classroom observations, unrestricted, controlled discussion with students, teachers and administrators. They questioned 9 students, 4 teachers, and 1 administrator (Kim & Taylor, 2008). The objective of the study was to determine ways to make improvements to educate at-risk students. Kim and Taylor (2008) discovered two affirmative themes: “I went from a dumping ground to a safety net” (211). The second overarching theme was; “I don’t want to go back to a regular high school” (Kim and Taylor, 2008, p.212). Soleil (1999) mentioned studies conducted in two states which found their alternative schools were dumping grounds for the students who had emotional, social, and behavior problems. Kim and Taylor (2008) also discovered that alternative schools have been successfully helping to reduce the number of trancies, improve attitudes toward school, and help students to stay in school. De La Rosa (1998) discovered that alternative programs implemented correctly can develop an increase in academic achievement, an increase in daily attendance, and a low dropout rate.

According to Leiding (2008), alternative education is “a separate program within a K-12 public school district established to serve and provide youth whose needs are not being met in the traditional school setting a choice or option” (p. 32). Alternative education is available in a number of different formats; as illustrated in alternative programs by choice, disciplinary alternatives, GED alternatives, therapeutic alternatives or a combination of these (Leiding, 2008). “Three indispensable goals are universal for

alternative schools: students attend by choice, the schools are responsive to unmet local needs, and the student body reflects the racial and socioeconomic mix of the community” (Leiding, 2008, p. 33).

The true educational alternatives, which are the alternative school and the GED, are supported on the assumption that all students can learn given the appropriate instructional setting and the proper teaching strategies and teacher assistance (Leiding, 2008).

An alternative school is a school that differs from traditional schools in curricula, purpose, or teaching methods. Alternative schools are generally described as maintaining small size, emphasizing one-on-one interaction between teachers and students, creating a supportive environment, allowing opportunities for student success relevant to student’ future, and allowing flexibility in structure and emphasis on student decision making (Leiding, 2008, p. 33).

Duke and Griesdorn (1999) utilized the Thomas Jefferson Center for Educational Design, an interdisciplinary research and development organization at the University of Virginia, to develop research in the development, execution, and assessment of alternative schools. The center paid particular attention to alternative schools that serve students who experienced little or no success in the traditional school setting.

Duke and Griesdorn (1999) found that alternative education can be a successful option for students who failed to succeed at their regular high school. Twenty-eight of the 32 schools studied, reported student academic success. Likewise, 21 of the 32 schools found success in improving behavior or psychosocial behaviors. They also

discovered that enrollment varied depending on the type of alternative program being offered at the school. Enrollment ranged from 54 to 89 students (Duke & Griesdorn, 1999).

One of the goals of alternative programs is to raise the overall graduation rate while decreasing the dropout rate (Raywid, 1994). One aspect to success in alternative education lies in the number of learners in individual classrooms, the learning styles of the learners, and the counseling services available to learners during a typical day (Leiding, 2008). Lange and Sletten (2002) reported that alternative schools are characterized by small class sizes, one-on-one interactions between students and teachers, supportive environments for the students, and flexibility in the school structure. Alternative schools educate approximately 1% of American school students. However, alternative schools are becoming more popular, due to the mandates of NCLB (McKee & Connor, 2007).

#### *Types of Alternative Schools*

According to Leiding (2008), there are three types of alternative programs: Type 1 programs, the student chooses to attend the alternative school (Leiding, 2008). This program focuses on academics, students and their success (Leiding, 2008). Type 2 programs are disciplinary programs. Students are usually sent to Type 2 schools based upon a disciplinary hearing; this is typically the student's last chance prior to expulsion (Leiding, 2008). "Type III alternative are for students who are presumed to need academic or social/emotional remediation or rehabilitation or both. The assumption is

that after successful treatment students can return to mainstream programs” (Leiding, 2008, p. 36).

A Type 1 alternative school can be used to offer at-risk students the opportunity to academically succeed by receiving the credits needed to graduate and become successful (Gregg 1999). Some other key characteristics of Type 1 alternative schools include that the staff is warm, nurturing, caring, and supportive of the students (Gregg, 1999). Teachers and administrators should ensure the delivery of a curriculum that is both challenging and rewarding to all of the students (Raywid, 1994). The school administrators are student centered, and relationships between the staff and students are the focal point; developing the whole child is also a primary focus (Gregg, 1999). The staff members have high expectations of the student’s academic, behavioral and social outcomes (Gregg, 1999; Leiding, 2008).

According to Raywid (1994), Type 2 programs, focus on behavior adaptation; there is little to no attention given to altering the curriculum as these programs are considered students’ last opportunity for success (Lange & Sletten, 2002). Type 3 programs are designed for students who need remediation or rehabilitation on academics or behavior (Lange & Sletten, 2002; Raywid, 1994). Equally, Type 2 and Type 3 programs aim to rehabilitate the students, based on the theory that the troubles are student driven (Raywid, 1994).

In a study in Florida by the Office of Planning and Budgeting during the 1979–1980 instructional year, it was shown that Type 2 schools made few benefits during the academic year. Florida schools officials dispensed approximately 58,000 assignments to

their in-school suspension programs. In the study, it was shown that the program showed no impact on the withdrawal rate or referral rate, other consequences or suspension or expulsion rates. Therefore, the researcher concluded that the Type 2 program did nothing to resolve the problems it set out to resolve (Raywid, 1994).

#### *Small School/Class Size*

According to Lange and Sletten (2002), administrators of large schools have an inclination to develop higher dropout rates due to the isolation that many of the students feel in the educational system. Smaller school sizes are preferred, as students feel safe and will receive additional one-on-one contact from teachers (Lange & Sletten 2002). McKee and Connor (2007) reported small class sizes improve the relationship between the teachers and students and allow for more individual help from the teachers during the day. This also promotes a feeling of family in the school community (Lange & Sletten, 2002). Another key factor that some small schools can offer is the ability to provide students with the right to be heard in the decision making issues of the school (Lange & Sletten, 2002). This seems to give the students a feeling of ownership and aids in making them feel that they are an essential member of the overall school population (Lange & Sletten, 2002). “A national survey of a decade ago found that alternative schools identify teacher-student interaction as their greatest departure from conventional schools” (Raywid, 1994, p. 29)

Talerico and Burstyn (2004) conducted a 5 year intervention to prevent violence in alternative schools with mixed studies from 1997 to 2002. The study was conducted in an alternative school with 22 staff members and 100 students (Talerico & Burstyn, 2004).

The researchers utilized a variety of observations, surveys and interviews to gather their data (Talerico & Burstyn, 2004). Because of the small size of the school, staff and students could develop personal relationships, and teachers had the ability to redirect off task and behaviorally troubled students. A warm and caring climate could be created along with more one-on-one contact between students and instructors, which gave the opportunity to students to achieve academically (Talerico & Burstyn, 2004).

Duke and Griesdorn (1999) reported that all of the schools surveyed had a small number of disciplinary infractions or expulsions. The school officials surveyed gave credit to small class sizes and low teacher-to-student ratios for the drop in discipline problems (Duke & Griesdorn, 1999). The researchers found that 70% of the schools had also lowered their expectation of the discipline code for everything but the most serious offenses (Duke & Griesdorn, 1999). Foley and Pang (2006) reported administrators and school personnel had the freedom over the decisions dealing with student behavior issues.

Administrators at institutions that remain small and maintain small class sizes will better enable their at-risk students to thrive (Raywid, 1994). These students are able to develop relationships with the adults in the building and feel a sense of community (Raywid, 1994). For student success, school districts and administrators should be actively ensured that class sizes do not exceed 10 to 15 students (Grobe, 2002). Research has shown that students receive individualized attention at an increased rate when there are fewer students in the classroom (Grobe, 2002).

According to Lange and Sletten (2002), administrators' at large schools have an inclination to develop higher dropout rates due to the isolation that many students feel in



the educational system. According to Zhang and Law (2005), special education students drop out of traditional high schools because they dislike school 32% of the time and due to behavioral problems 27% of the time. Students are more likely to drop out when they feel their needs are being ignored and become annoyed at the educational system and teachers (Zhang & Law, 2005). Smaller school sizes are preferred because students feel safe and receive more one-on-one contact from teachers (Lange & Sletten, 2002). This also promotes a feeling of family in the school community (Lange & Sletten, 2002). Another key element that some small schools offer is the ability to provide students with the right to be heard in the decision making process of the school (Lange & Sletten, 2002).

### *School Climate*

According to Lange and Sletten (2002), school failure can impact students' decision to stay in school. The researchers reported "a series of suspensions, missed classes, disciplinary actions and academic failures leave this group of students weary of the school experience and distrustful that the education system can be a tool for their success" (Lange & Sletten, 2002, p. 11). A school climate produced by caring teachers is the reason students stay at alternatives schools rather than returning to their regular high school (Kim & Taylor, 2008). Kim and Taylor (2008) discovered that students felt that alternative school teachers cared about them, gave them more one-on-one attention, were willing to help, gave them individualized instruction and gave extra help to ensure they succeeded. Kim and Taylor (2008) also discovered that administrators and teachers

admitted they felt they were providing an invaluable service to their students and were providing the students the help they needed to be successful.

Students enroll in alternative schools for multiple reasons, including academic failure, reduced student attendance, disturbing conduct, substance abuse, behavioral problems, pregnancy, and juvenile law violations (Escobar-Chaves et al., 2002).

Escobar-Chaves et al. (2002) discovered;

Comparing results from the 1998 Alternative Youth Risk Behavior Survey (ALT-YRBS-98) with a sample of 8,918 to the 1999 national YRBS results with a sample of 15,349 demonstrates that the prevalence of most violent behaviors such as weapon carrying, gun carrying, knife and club carrying, and fighting are significantly higher among students attending alternative high schools compared with students at regular high schools (p. 357).

The researchers stated that roughly 32.9% of alternative students brought a weapon to school compared to 17.9% of regular high school students (Escobar-Chaves et al., 2002). Sixty-percent of the alternative students surveyed reported being involved in a physical confrontation within the past year compared to 35.7% of regular high school students (Escobar-Chaves et al., 2002). In Bridgeland et al.'s (2006) study, more than 57% of students reported their school failed to keep them safe from violent activity. Escobar-Chaves et al. (2002) conducted a cross-sectional survey with youth in 10 alternative high schools in Houston, Texas. The researchers collected data from 494 youths, 282 females and 212 males (Escobar-Chaves et al., 2002). The researchers concluded that thirty days prior to the start of the survey, 22.7% of the respondents

carried a knife, gun or club to school (Escobar-Chaves et al., 2002). The research also found that male students were more likely to carry a weapon than the female population (Escobar-Chaves et al., 2002). The researchers further broke down the data and found 11.1% of students reported bringing a gun, 17.2% carried a knife or club and 50.6% all students had been involved in some type of physical altercation within the last year of school (Escobar-Chaves et al., 2002).

According to Escobar-Chaves et al. (2002), elevated levels of aggressive conduct among alternative high school students both nationally and within the city of Houston, Texas supported organizing and beginning prevention and intervention programs for this population. Talerico and Burstyn (2004) found that a small school setting allows the school to begin with a 3-day seminar for every teacher on ways to incorporate violence prevention into their curriculum. The students were required to enroll in a violence prevention class once a week, which included a variety of anger management strategies, conflict resolution techniques, and social skills (Talerico & Burstyn, 2004). The staff must make an extraordinary effort to create positive relationships with each of the students and their parents (Lange & Sletten, 2002). Students surveyed reported that they worked hardest to be successful for teachers who had high expectations of them and who generally cared about their success (Lange & Sletten, 2002).

NCLB was used to alter the way education, including alternative education, was conducted (McKee & Connor, 2007). According to Ahearn (2004), NCLB legislation has a direct impact on alternative schools and the way they will operate. NCLB legislators required that administrators all schools, including alternative schools, focus on

performance and meet annual yearly performance (AYP) goals in core subjects and certain other criteria, such as attendance and graduation rates (NCLB, 2003; McKee & Connor, 2007). With the sanctions NCLB carries, alternative schools may deal with increased tension and decisions on how much freedom schools have with regards to curriculum and instruction (Ahearn, 2004). District officials see attendance rates as important because attendance troubles and truancy are typically warning signs of students dropping out of school (Smink & Reimer, 2005). Administrators at alternative schools had to find a way to bridge the gap between existing student performance levels and annual measurable objectives (McKee & Connor, 2007). According to McKee and Connor (2007), an important aspect to ensuring the success of every at-risk student is to make certain each student receives individual attention. Relationships teachers build with students are extremely important in building the student's academic, social, and emotional success (McKee & Connor, 2007).

Administrators of educational facilities face challenges in three important areas of a child's developmental years: intellectual performance, achievement levels and moral development (Davidson & Lickona, 2008). De La Rosa (1998) mentioned at New Horizon Alternative School, the students are encouraged to take charge of their education and are given positive feedback for their success. Since students take charge of their educational goal, they have stopped blaming the educational system or teachers for their lack of success (De La Rosa, 1998). The New Horizon alternative school also boasts a 94% attendance rate, due to their flexible scheduling and self-paced curriculum (De La Rosa, 1998). The key factors that educators are facing regarding academics include

reducing the number of dropouts, increasing academic scores on standardized tests, motivating students to do their absolute best, reducing incidents of cheating, increasing student attendance, and preparing students for college, trade schools, and the employment sector (Davidson & Lickona, 2008).

One of the main aspects of developing a successful alternative school is building a community-based school. Schools that are caring communities develop students who will then become compassionate adults; these students will take skills learned out into their community and pass on the mission of caring to others (Doyle & Doyle, 2003). For students to come to school and improve their attendance, school officials should help them feel important, as “kids don’t care how much you know until they know how much you care” (Urban, 2008, p. 65).

The foundation for building a caring community is that it will promote the child’s growth and persuade the student to expand and excel through their educational experience (Lange & Sletten, 2002). A school dedicated to character attempts to develop a well-mannered, kind, and just community (Character Education Partnership (CEP), 2010). An effective teacher can build relationships, while teaching and ensuring structure in the class (Rodriguez, 2005). Ginott (as cited in Lickona, 1991) stated:

I have come to a frightening conclusion that I am the decisive element in the classroom...As a teacher; I possess tremendous power to make a child’s life miserable or joyous. I can be a tool of torture or an instrument of inspiration. I can humiliate or humor, hurt or heal. In all situations, it is my response that

decides whether a crisis will be escalated or de-escalated, and a child humanized or dehumanized. (p. 71)

The character education program needs nothing more than to be integrated throughout the regular curriculum (Elkins & Sweet, 2004). When educators convey to students the character elements of the lesson, they increase the significance of the topic being taught. This, in turn, can increase the students' natural interests in the subject matter and enhance the students' engagement in and contribution to the lesson (CEP, 2010). Teachers need to remember one thing: "If you can reach 'em, you can teach 'em" (Urban, 2008, p. 8).

Another aspect that makes alternative schools different is the personal approach educators use to motivate at-risk students in the alternative environment (Leiding, 2008). If alternative educators are to ensure at-risk students obtain a quality education, they must illustrate that the outline of alternative schools is consistent with the philosophy of public teaching (Conrath, 2001). Conrath (2001), also mentions, "True equity in schools calls for using different means to bring everyone the same end" (p. 586). Successful alternative programs are used to give teachers the flexibility to design strategies and techniques to fit the needs of their students (Conrath, 2001).

One of the obstacles that most alternative schools administrators need to overcome is the attitude of the community, other educators, and other district students about alternative programs (Leiding, 2008). This is frequently due to a general lack of understanding of mission, vision, and goals of the alternative schools (Leiding, 2008). Some of the most common problems students attending alternative schools have include

behavioral problems, academics, and attendance and as a result these individuals are considered to be juvenile delinquents (Kim & Taylor, 2008). These are some of the toughest stigmas for youths and schools to overcome to become successful (Kim & Taylor, 2008). Most non-alternative educators do not realize that alternative high schools are held to the same district and state standards as the students' traditional home schooling (Grobe, 2002). The key to making alternative schools different from the students' home schools are the techniques, strategies, and approaches the teachers take to inspire students to learn (Leiding, 2008). This is a major barrier alternative school administrators must conquer because they are where at-risk individuals with behavioral problems, who are academically challenged and struggling, are sent to finish their educational program (Kim & Taylor, 2008). This stigma is destructive to the school and students (Kim & Taylor, 2008).

There is an array of alternative programs serving students who have failed in traditional schools. Alternative education was conceived on the notion that several students may blossom in a setting arranged in a different way to a regular high school (Kim & Taylor, 2008). The next section of this literature review will discuss some of the different types of alternative education available.

#### *General Education Development Program (GED)*

The GED course was started in 1942 as a high school equivalency test for American soldiers returning from World War II (GED Testing Service: Policy and Procedure Manual, 2008; Raver, 2006). The examination was administered by officials at the United States Armed Forces Institute (GED Testing Service: Policy and Procedure

Manual, 2008). This program was designed to prepare and test the students on the most important ideas and conclusions that are normally associated with a high school diploma (GED Testing Service: Policy and Procedure Manual, 2008). The purpose of the GED was to give soldiers an opportunity to attain their high school equivalency diploma so they could continue to pursue their educational or personal goals without delay (GED Testing Service, 2008; Raver, 2006).

In the 1950s, civilians were allowed to take the test for the first time, it was determined the GED was appropriate for all adults and students to take in order to earn their high school equivalence certificate (GED Testing Service: Policy and Procedure Manual, 2008). The veterans' administration officials continued to administer the GED test until the mid-1960s when the official name of the GED testing service came into existence (GED Testing Service: Policy and Procedure Manual, 2008). "For more than 60 years, the GED tests have provided a means to obtain personal satisfaction, as well as to realize educational and occupational opportunities, for millions of adults who, for many reasons, did not complete their formal high school studies"(GED Testing Service: Policy and Procedure Manual, 2008, p. 2). The GED is seen as a second chance opportunity for students who have failed to finish high school or receive their high school diploma (Barton, 2006; Raver, 2006).

The GED assessment is comprised of five tests, including mathematics, science, history, reading, and writing (GED Testing Fact Sheet, 2010). "Over 17 million people have earned a GED credential since 1943" (GED Testing Fact Sheet, 2010, p. 1). According to the GED Testing Fact Sheet (2010), in 2008, 73% of all individuals who



attempted the GED half a million people passed all five tests and earned a GED credential. According to Barton (2006), one-seventh of the high school diplomas awarded currently are based on students effectively taking and passing the GED. Roughly 21 million people were tested using the GED between 1972 and 1999, with approximately 800,000 adults testing on a yearly basis (Raver, 2006). The GED credential is accepted at 98% of all colleges and universities that require a high school diploma for admission (GED Testing Fact Sheet, 2010). Ninety-six percent of companies that require a high school diploma for employment will accept a GED certificate in place of a high school diploma (GED Testing Fact Sheet, 2010).

#### *GED Options Program*

Officials in a number of states offer the GED options program and offer their students either a high school diploma or an alternative high school credential upon passing all five components of the GED test and the other program requirements (Southeast Comprehensive Center, 2008). Administrators in Missouri, Florida, Indiana, Louisiana, Mississippi, and South Carolina offer the program and a high school diploma upon graduation (Southeast Comprehensive Center, 2008). The program is offered in conjunction with the state and school district, therefore, the student studies for the GED while attending an accredited high school (Southeast Comprehensive Center, 2008). One of these accredited programs is the Missouri options program. The young adult enrolled in this program prepares for the GED while finalizing a number of other course requirements from the state of Missouri (MODESE, 2009b). Students enrolled in the

Missouri Options program are in danger of dropping out of high school without a high school diploma (MODESE, 2009b).

The Missouri Option Program is designed to target students who have the capabilities to complete Missouri High School Graduation Requirements, but for a variety of reasons lack the credits needed to graduate with their class and are at-risk of leaving school without a high school diploma (MODESE, 2009b, para. 4).

Missouri officials require students enrolled in the Missouri options program to have taken a half credit of American government, personal finance, and health, along with successfully passing the GED test (Parkway School District, n.d.). The students are also required to pass both the U.S. and state Constitution tests (MODESE, 2009b; Parkway School District, n.d.). Students are required to attend school 15 hours a week and partake in a work study program for an additional 15 hours per week (MODESE 2009a; Parkway School District, n.d.). The students are able to attend class for the entire 30 hours per week if they are unable to find employment (MODESE, 2009b). Upon completion, students receive a high school diploma from the accredited school district (Parkway School District, n.d.).

### *Teacher Development and Expectations*

The individualization, differentiation, and personalized lessons that the teachers had been providing to students that worked in one room schoolhouses are no longer effective (Christensen et al., 2008). Bridgeland et al. (2006) found students want better teachers, subject matter that is relevant to their lives and more one-on-one time with their teachers so they are receiving immediate feedback. Students leave school early due to a

lack of individualization, personalization, and differentiation (Engel, 1994). Engel (1994) discovered that a number of dropouts reported they left school early due to classroom activities being dominated by lectures, worksheets, and tests. Students went on to state that the majority of teachers presented the material but were not there to help or work with the student to give them the help needed (Engel, 1994). Hanson and Torso (2007) found that dropouts had a desire to graduate but also wanted a rigorous curriculum that was meaningful to them.

Teacher preparation should include project-based learning and 21st-century critical thinking skills (Jukes et al., 2010). American young adults must graduate with a sound understanding of all the academic skills to be successful in the 21st century (Mirel, 2006). Digitally connected students think differently and need more than drill-type activities (Jukes et al., 2010). In a study conducted by the Bertelsmann Foundation (1998) it was found that:

One hundred eighth-grade students were taught social studies using a traditional approach. Students sat in the rows while they were lectured on the course content. These students were given traditional content-focused tests. Another group of 100 students were taught the same curriculum using nontraditional, project-based methods. Evaluation was a combination of student self-evaluation and joint student–teacher assessment. At the end of the year, the students in both groups were given the same traditional standardized test. Their scores were identical. However, one year later the students were given the same traditional standardized test. The results were dramatically different. The students who had

been taught using traditional methods scored less than 15 percent on the test and indicated that they saw social studies as the memorization and isolated facts. The group that had been taught using a project based approach scored more than 70 percent on the test and indicated that they saw social studies as the study of complex relationships in the world. (Jukes et al., 2010, p. 84–85)

According to McKee and Connor (2007), NCLB was used to bring changes to alternative education. In NCLB legislation, administrators of all schools, including alternative schools, were required to focus on academics, and specifically required to meet or exceed adequate yearly performance goals and objectives in the mathematics and communication arts (NCLB, 2003; Swanson & Chaplin, 2003). NCLB guidelines also require schools and districts to hire highly-qualified teachers for all of their classrooms (NCLB, 2003). In NCLB guidelines, school administrators were required to pay attention to and meet annual attendance and graduation rate goals (Hall, 2007; NCLB; 2003, Swanson & Chaplin, 2003). Alternative schools administrators had to find methods to bridge the wide gap that had developed between student performance levels and annual measurable objectives (McKee & Connor, 2007).

Teachers should ensure they teach a rigorous, standards-based curriculum that includes differentiated instruction and the utilization of a variety of instructional strategies, research-based instructional strategies assist every student when used time after time in the classroom (Perelles, Omdal, & Baldwin, 2009). According to Anastos (2003), teachers can be overwhelmed with the amount of differentiation and lesson planning required when working with at-risk students. Ensuring the curriculum is high-

quality helps to ensure students are active and engaged in the lesson (Shannon & Bylsma, 2006). High-quality teachers also need to accept that every child can learn and achieve at high levels (Pereles et al., 2009). At-risk teachers should develop standards-based lessons that can be used to ensure alternative students are engaged and actively involved in the lessons (Anastos, 2003). Teachers must ensure these lessons are differentiated to ensure students are learning and engaged in real world activities, lessons are project-based, and have rigor with high expectations (Anastos, 2003). Teachers also have to ensure these lessons can be mobile, since some of these students may be on homebound instruction, need smaller learning center instruction, or individual instruction (Anastos, 2003).

The introduction of NCLB legislation brought about high stakes testing that has been used as the driving force behind a number of educational decisions in every school and district in the United States (Honigsfeld & Dunn, 2009; Swanson & Chaplin, 2003). According to Honigsfeld and Dunn (2009), “standardized exams test strongly favor analytical, sequential cognitive processors-that is, students who can concentrate on, internalize, and retain new and difficult information through traditional teaching” (p. 220). The problem with this type of assessment is that students were required to attend numerous of lectures, take many notes, complete numerous reading assignments, and answer end of chapter questions and tests; however, the majority of at-risk students struggle with this type of instruction as they have a tendency to fall behind, lose motivation, and eventually fail (Honigsfeld & Dunn, 2009).

Replying to the NCLB and the increased pressure of high stakes examinations within all American schools, Boudett et al. (2005) affirmed that “much has been written about the possibility that school faculties will resort to ‘drill and kill,’ a response that will reduce the quality of children’s education” (p. 700). According to Honigsfeld and Dunn (2009), drill and kill refers to the potentially destructive and excessive over use of monotonous, drill-based actions that guide the way to ruining the joy of learning for students. This is why administrators of alternative programs should offer a more flexible and creative curriculum by providing lessons geared to the tactual and kinesthetic learners (Honigsfeld & Dunn, 2009). School district officials should ensure they staff alternative schools with highly-qualified teachers who understand the meaning and importance of differentiate instruction, interventions and one-on-one instruction (Anastos, 2003).

High quality teacher development is essential for educating the high-risk population (Leiding, 2008). One challenge of teaching in an alternative setting is being able to identify students’ most effective learning styles and adapting the lessons to meet those particular styles (Leiding, 2008). Research showed an important learning strategy for schools to employ with at-risk students was to ensure they are taught by highly trained teachers (Buffum et al., 2009). Unfortunately, in the vast majority of schools, highly-qualified, successful teachers are instructing high achievers, while the new, inexperienced teachers are teaching the at-risk, low achieving students (Buffum et al., 2009).

Antastos (2003) stated that teachers from regular high schools view alternative schools as being inferior. This is in part because alternative high school students are going to school for fewer hours a day and thus having fewer contact hours with their teachers (Anastos, 2003). Therefore, teachers at alternative schools should ensure that the same curriculum and high standards are being taught to the students at the alternative high school (Anastos, 2003). Mckee and Connor (2007), found through their study, Bryant Alternative School was unlike the traditional schools, but not easier. The school strived to excel and attain the same district goals as the other traditional high schools in the district (McKee & Connor, 2007).

Teachers cannot dilute the curriculum to meet the requests of the learner and should develop methods to engage students to bring their intellectual levels up to the required levels of the district's curriculum (Lange & Sletten, 2002). According to Hanson and Torso (2007), students desire a curriculum that has rigor, and teachers need to ensure students are staying engaged. Hanson and Torso (2007) surveyed 14 participants, and most participants reported the main reasons for dropping out as a lack of rigor within the curriculum, lack of belonging, lack of relationship with their teachers, and high school was not challenging. Along with NCLB and the increasing demand of tests on states, it is imperative that alternative education teachers be given equivalent, if not more advanced, professional development training than their counterparts (Anastos, 2003). Teachers should be taught and professionally developed with the alternative student in mind (Anastos, 2003). According to Leiding (2008), education is much more successful when the student has a desire to be taught. Lange and Sletten (2002)

discovered students who are motivated to graduate are more likely to be successful in alternative schools.

Carver et al. (2010) conducted a survey using the fast response survey system (FRSS) in the fall of 2008 and a follow up survey was administered in the spring of 2009.

The Fast Response Survey System (FRSS) was established in 1975 by the National Center for Education Statistics (NCES), U.S. Department of Education. FRSS is designed to collect issue-oriented data within a relatively short time frame. FRSS collects data from state education agencies, local education agencies, public and private elementary and secondary schools, public school teachers, and public libraries. To ensure minimal burden on respondents, the surveys are generally limited to three pages of questions, with a response burden of about 30 minutes per respondent (Carver et al., 2010. p. 2).

The researchers mailed the initial survey to 1,806 school districts located within the United States, and District of Columbia (Carver et al., 2010). The follow-up survey was mailed to 1,698 districts officials who answered the initial 2008–2008 survey (Carver et al., 2010). There was a 95% reply rate to the initial survey and a 99% reply rate to the follow-up survey (Carver et al, 2010).

Carver et al. (2010) discovered that, “in addition to regular requirements for teaching in alternative schools and programs, 30 percent of districts reported having specific requirements for teaching in alternative schools and programs, and 48 percent reported having professional development requirements” (p. 4). Kim and Taylor (2008) conducted research at Prairie View Alternative School and discovered that teachers in the



alternative school believed they were treated as second rate to the rest of the teachers in the district. Teachers did not feel they were given the same opportunities of professional development as other district teachers (Kim & Taylor, 2008). Teachers felt like outsiders when attending district meetings and did not feel like district officials visited their school or students as often as the other high schools (Kim & Taylor, 2008). There was also some concern by teachers at the alternative school that, at times, the alternative school became a dumping ground for unwanted certified staff members (Kim & Taylor, 2008).

Alternative teachers should be taught instructional strategies so they can offer a combination of different learning styles and methodologies (Leiding, 2008). For example, these could include cooperative learning, pacing, differentiated instructional strategies, and different intervention techniques (Leiding, 2008). Because of NCLB and AYP, administrators at all schools, including alternative schools are held to the same rigorous state and district curricular standards (Anastos, 2003). The difference is in the teaching methodology, class sizes, pace, and the approach taken for student success (Anastos, 2003). Alternative instructional programs strive to develop rigorous curriculum, strategies, methodologies, and tactics to provide students with the same chance to learn at high levels (Anastos, 2003). Alternative schools should ensure they hire the most highly qualified teachers to work with at-risk students (Buffum et al., 2009). Gunn et al. (2009) completed a comprehensive review of 18 of 1600 selected projects of Alberta, Canada's initiative for school improvement. The researchers found one of the most predominant themes regarding educational modifications was differentiated teaching (Gunn et al., 2009). Differentiated instruction provided students

with the opportunity to approach the curriculum in more significant ways (Gunn et al., 2009). The majority of educators instinctively understand that everyone learns in a different way and utilizes different methods, techniques, strategies and different rates of speed (Christensen et al., 2008).

Christensen et al. (2008) stated that Gardner's theory of multiple intelligence showed that individuals learn differently through a variety of situations. Gardner (1987) defined intelligence as "an intelligence is an ability to solve a problem or to fashion a product which is valued in one or more cultural settings" (p. 25). Gardner's (1987) multiple intelligence theory identified eight individual intelligences and possible ways that individuals can learn (Gardner, 1987; Guignon, 1998). Teachers who are aware of the multiple intelligence theory have been motivated to discover alternatives to their teaching styles, thus helping and reaching more students (Guignon, 1998). With a better understanding of the multiple intelligence theory, teachers, administrators and parents can work and assist all learners to become more successful (Guignon, 1998). According to Christensen et al. (2008), Gardner's research indicated that even though a number of individuals have some ability in all eight intelligences, most individuals do well in only one or two of the intelligences.

Quinn and Quinn (2002) found in their study at Reuther Alternative High School, "Teachers are carefully selected to work at Reuther, and are chosen for teaching competence, computer experience, and most of all, warm and helpful personalities. All of these qualities are needed by students who struggle with learning" (p. 8). The finest

educators have a deep desire to do their best and know how to excel. These teachers excel in finding new and exciting ways to teach.

### *Attendance*

In line with nationwide statistics, absenteeism, for the most part, is frequently the best gauge for student engagement and a noteworthy indicator of students dropping out of school (Bridgeland et al., 2006). According to Reeves (2008), research supports the link between student achievement and attendance behaviors. Reeves (2008) stated that philosopher Yogi Berra once said, “school success is 90 percent showing up; the other half is mental” (p. 90). One of the most significant reasons students find themselves in an alternative school or drop out of school, is due to an unchecked rate of absenteeism. Wimmer (2008) reported that frequent absences not only affect student test scores and overall achievement levels, but can also affect their social growth and maturity. A number of reasons students fail to attend school range from academic failures to not feeling connected, and personal or family problems (Wimmer, 2008). Bridgeland et al. (2006) found 65% of their respondents stated they had skipped or missed school a number of times the year prior to dropping out.

Attendance and truancy have been an issue in schools nationwide for a number of years. For at least the past 12 years, student’s lack of attendance and truancy has been one of the top predicaments facing schools (Rohrman, 1993). Daily there are hundreds of thousands of students who are not in attendance at school, and many of these students are missing without an excuse and are, therefore, considered truant from school (Baker et al.

2001). Attendance issues have been a problem for administrators, teachers, parents, and the community for decades (Baker et al., 2001). Rohrman (1993) found,

Truancy is not merely a modern dilemma. As early as 1872, the problem of ‘early school leavers’ was causing concern for school officials. In 1874, only one-third of the students required to attend public school actually did so. In 1933, more than two-thirds of all school absences were non-illness-related (p. 40).

There are four main causes for student-related truancy issues: family issues, school-related issues, economic factors, and personal reasons (Rohrman, 1993). The family’s influence consists of issues related to relationships the parents have with their children, students’ living conditions, and how frequently the family relocates (Rohrman, 1993). Other family influences can include alcohol and drug abuse, poverty, domestic violence, emotional and physical abuse, prior dropouts, and a negative attitude towards education (Baker et al., 2001).

School administrators should understand that the school environment may cause students to be absent or truant from school (Rohrman, 1993). Therefore, students who fail to attend school, and fail to learn often drop out of school (Smink & Reimer, 2005). Students, who fail to develop relationships with teachers, staff, or other classmates, fail to feel a sense of belonging or security necessary to become successful in the academic realm (Rohrman, 1993). “Attendance drops when there are overly restrictive rules, high rates of teacher turnover or absenteeism, racial differences between students and teachers, and high amounts of violence in the school” (Rohrman, 1993, p. 40). Once an individual

develops an attendance issue at school, it is possible they will develop negative social personal behaviors they will take into the workforce (Smink & Reimer, 2005).

Smink and Reimer (2005) identified 15 effective strategies that can be used in schools. Although the Fifteen Effective Strategies were developed to be used to prevent students from dropping out, they are also pertinent to the issues of attendance improvement and truancy prevention. The strategies are grouped into four general categories: school and community perspective, early interventions, basic core strategies, and making the most of instruction (Smink and Reimer, 2005, p. 1).

Students, who are forced to work due to the economy and a resulting need to provide for their families will eventually have school attendance issues (Rohrman, 1993). Other examples of economic issues include students who live in single parent residences, who have parents who work multiple jobs, who lack transportation, who lack affordable child care, and who lack affordable housing (Rohrman, 1993). School administrators should ensure students are aware of the attendance policies and the repercussions of violating this policy (Baker et al., 2001). Other situations that may affect students' attendance are peer pressure, failure of the student to value attendance and education, drug and alcohol abuse, and poor psychological or physical health (Baker et al., 2001).

Students with recurring attendance problems have fewer opportunities to gain knowledge and, therefore, have lower academic success levels (McCray, 2006). Lack of commitment to school has been identified as an at-risk factor for early teen pregnancy, juvenile delinquency, school dropout, and drug abuse (Baker et al., 2001). "According to

the Los Angeles County Office of Education, truancy is the most powerful predictor of juvenile delinquent behavior” (Manual To Combat Truancy, 1996, p. 3). Students who leave school before graduating may be unable to find a job, may receive welfare and earn a much lower salary than those who did earn a diploma (McCray, 2006).

Schools and school district administrators lose state and federal funding every year due to attendance problems (McCray, 2006). Therefore, school administrators have a good reason to develop a plan to combat truancy problems.

Each school and each community need to decide which steps to take to reduce truancy. These decisions should be made with the active involvement of parents, educators, law enforcement personnel, juvenile and family court judges, and representatives from social service, community and religious organizations (Manual To Combat Truancy, 1996, p. 4).

Nielsen and Gerber (1979) conducted a mixed-methods study on truancy by collecting quantitative data on 146 truants and performing interviews with 33 middle school students, both males and females, and school administrators. It was found that boys started to skip school earlier than girls; many of the truants had emotional problems and were angry and depressed, and four had attempted suicide (Nielsen & Gerber, 1979). Fifty-seven percent of the truants had at least one parent who had failed to earn their high school diploma. Seventy percent of the truants blamed school for their truancy (Nielsen & Gerber, 1979). Seventy-three percent stated that they disliked school, while 75% stated that their experience with their classroom teachers was the reason for their truancy (Nielsen & Gerber, 1979). The majority of truants expressed a desire to graduate high

school but understood that skipping school could prevent them from reaching that goal (Nielsen & Gerber, 1979). (Nielsen & Gerber, 1979). “Another important finding of this study was that certain responses by the school act as a stimulus for more truancy. Too often, school administrators did not attempt to understand the antecedents of truancy and respond primarily with punishment” (Nielsen & Gerber, 1979, p. 324). Therefore, absenteeism is frequently associated with student engagement and a noteworthy predictor of dropping out (Bridgeland et al., 2006). One option is to offer alternatives like online learning, so students do not have to be physically present in the school building.

### *Online Learning*

The Internet is altering the way instruction can be conveyed and the way students are taught (Burgess & Strong, 2003). One of the major reasons students struggle in school is because of the one-size fits all system is designed to teach all students at the same rate with similar teaching styles and modalities (Christensen et al., 2008). Online learning can be delivered in one of three ways; the first, students controlling their rate of independent study (Burgess & Strong, 2003). Next, Students attend both class and utilize online lessons to continue their learning, these students communicate with their teacher’s both online and in-person; therefore this is asynchronous interactive (Burgess & Strong, 2003). The final way is for students to attend lectures via the internet, questions are asked by either e-mail or online interactive sessions; therefore this is considered synchronous learning (Burgess & Strong, 2003). Effective computer-based education includes the student’s connection to the subject matter and to real world experiences, while innovative teachers provide rigorous, challenging, and interesting lessons to their students

(Slaughter, 2009). According to Burgess and Strong (2003), “proponents argue that online courses actually are better than traditional instruction at discouraging the student passivity and encouraging lifelong learning. Particularly in an interactive, multimedia environment, students often find greater opportunities to learn by working through new concepts” (Burgess & Strong, 2003, p. 3).

Zapalska and Brozik (2006) reported teachers should also consider a student’s learning style, especially during online learning. Online courses have a tendency to be based solely on a visual learning style and a student’s ability to read; therefore, to motivate and engage the online learner, educators should utilize auditory, visual, kinesthetic styles of learning (Zapalska & Brozik, 2006). Online teachers should also teach and engage student in reading and writing throughout every online learning course (Zapalska & Brozik, 2006). Online teachers should also reach out to their students; communication is an extremely important aspect of ensuring student engagement (Ash, 2009). Arnoldy (2008) reported if computers take over lecturing, teachers will have more time to work one-on-one with students who need help. “However, With the right subject matter, with the right instructor or facilitator, and for the right student, Internet or online classes’ can provide an effective educational environment and offer viable alternative to traditional classroom instruction” (Cooper, 2001, p.58).

According to Christensen et al. (2008), schools should be moving towards a student-centric model, if the objective is to instruct every student, while requesting schools ensure all students are taught the information and have the knowledge to escape poverty and have a realistic opportunity to realize their goals and aspirations. One way to



achieve the student-centric model is through computer-based learning, which permits students to learn at their own pace, matching their intellectual learning capability, while allowing teachers to act as coaches and mentors (Christensen et al., 2008). Trotter (2008) explained the Apex Learning Corporation has redesigned their online curriculum to meet the needs of their students by utilizing audio, video, graphics, and animation. “The 21<sup>st</sup> Century Fluencies are not about technical prowess, they are critical thinking skills, and they are essential to living in this multimedia world” (The Fluencies, 2011). These are skills students and adults will need to compete in the technology era (Jukes et al., 2010).

Quinn and Quinn (2002) conducted a mixed study at Reuther Alternative High School on the Plato online learning system. Four of the teachers interviewed enjoyed the flexibility the system gave them with helping the at-risk student succeed. This allowed them to tutor students and give them one-on-one attention while the other students were engaged in their own learning plan (Quinn & Quinn, 2002).

The use of online classes also offered the chance for students to enroll in more difficult classes when Advanced Placement courses or specialized electives are not taught at their schools (Pape, 2005). At-risk students have received an opportunity for success through online learning that may otherwise not been afforded to them, due to the lack of resources, scheduling, and lack of qualified teachers (Pape, 2005). A number of online companies are now offering credit recovery bundles as an incentive to increase graduation rates and help at-risk students restore their educational careers (Trotter, 2008).

With the inception of NCLB and their accountability standards, known as AYP, schools are held accountable each year for teaching all of their students the individual

state standards in math and communication arts (Hall, 2007; NCLB, 2003; Swanson & Chaplin, 2003). NCLB also requires schools to increase attendance and graduation rates (NCLB, 2003). This legislation puts pressure on school boards, administrators, and teachers to increase the graduation rate and find alternatives to keep students actively engaged in education; online learning is one way to increase the graduation rate (Pape, 2005).

According to Slaughter (2007), with the inception of the Internet, podcasts, video games, cell phones, and portable technology, the industrial era of society has moved into the technological generation. Members of the technology age have witnessed the advent and growth of the Internet, Twitter, Google, Facebook, blogs, and cell phones (Slaughter, 2007). The challenge will be to keep up with the pace of technology; with the inception of the Internet and search engines, information is doubled every 54 days via technology (Pape, 2005). According to Prensky (2001),

Today's average college grads have spent less than 5,000 hours of their lives reading, but over 10,000 hours playing video games (not to mention 20,000 hours watching TV). Computer games, email, the Internet, cell phones and instant messaging are integral parts of their lives (p. 1).

Due to the increase in technology, teachers can no longer be expected to be the expert on education, and/or the basis for all knowledge (Pape, 2005).

Educational systems have spent billions of dollars on computers and technology over the last two decades (Christensen et al., 2008). Christensen and Horn (2008) stated that the investment has done little to improve education or student academic achievement

levels. “Technology can act as a catalyst that transforms the classroom into an interactive learning environment, but many educational institutions are not making full use of the latest advances in networking and communication technologies” (Christen, 2009, p. 29). To bring change to the classroom and make education successful, there needs to be a disruption to the educational processes that are in place today (Christensen & Horn, 2008; Christensen et al., 2008). School administrators should be introduced to the “disruptive innovation theory” (Christensen & Horn, 2008, p. 2). Every business leader produces two different ways that improvements can be utilized: the rate at which technology advances and the rate at which consumers can make use of the technological improvements (Christensen & Horn, 2008). The use of a disruptive innovation offers services to people who are unable to achieve results with the company’s original product, these individuals are called, “non-consumers” (Christensen & Horn, 2008; Christensen et al., 2008).

Christensen and Horn (2008) stated that online education will be a disruption that starts by working with a small group, such as those learners who are in danger of dropping out of high school (Christensen et al., 2008). In the beginning, online education will not be accepted within the traditional model of classroom teaching and learning, but eventually it will be utilized by all students (Christensen & Horn, 2008; Christensen et al., 2008). Lips (2010) stated that online education will afford students the opportunity to obtain personalized education from educators throughout the United States and across the continent. The most highly-qualified teachers will be able to utilize technology to reach more students while individualizing lessons for their students (Lips, 2010).

The goal is to apply computer-based education in a manner that fosters the classroom into a student-centered atmosphere (Christensen & Horn, 2008). Organizing computers into the rear of the classroom or into computer labs as a means of supplementing instruction or as the focus of instruction is not the answer to improved academic achievement (Christensen & Horn, 2008). Online education is the connection between utilizing technology while capturing students' interests and ensuring the transformation of education (Pape, 2005). In the course of computer networking, instructors have the capability to expand the classroom beyond the four walls and develop the critical thinking skills needed to succeed in college and the workforce (Christen, 2009). "Through online courses and virtual schools that serve both students and teachers, we can begin to shift our focus from the three R's to an education system that builds skills in the three C's: content, collaboration, and community" (Pape, 2005, p. 13). Online education will provide students with the opportunity to access wider curricular offerings, Advanced Placement courses, credit recovery courses, and remedial courses (Christensen et al., 2008). Online courses provide students with the opportunity to enroll in classes otherwise not offered through the district due to a lack of qualified teachers or funding (Pape, 2005). Quinn and Quinn (2002) found that computers have been in schools for approximately 10 years. The majority of computers were utilized by the instructor to keep track of student's grades, attendance and communication (Quinn and Quinn, 2002). However, some classrooms had student computers placed in the back of the classroom, utilized mainly for word processing (Christensen et al., 2008). To improve academic achievement, areas of nonconsumption must be addressed to establish

technology-based education (Christensen & Horn, 2008; Christensen et al., 2008).

Technology-based education needs to be implemented wherever it will be useful and accepted by existing educational professionals (Christensen et al., 2008). Once the school solidifies the plans, the program can begin to take root, have time to grow, and the student's academic achievement will begin to change for the better (Christensen et al., 2008). "The use of technology forms the bridge into real-world relevance and creates a more authentic learning experience for students" (Slaughter, p. 19). E-learning has the capability of improving efficiency and lowering the price of instruction, improving taxpayers' attitudes toward education while increasing the graduation rate, and lowering the dropout rate (Lips, 2010).

The image for online interactive classrooms is not innovative (Christensen et al., 2008). Teachers are utilized as tutors, coaches, and mentors, giving students' individualized attention and one-on-one teaching while the rest of the class works independently online (Christensen & Horn, 2008; Lips, 2010; Quinn & Quinn, 2002). "Technology has the power to make the instructor a better facilitator or coach, bringing greater resources to bear in the classroom and adjusting the instruction to fit the individual" (Christen, 2009, p. 29). The hope is that students are engaged and motivated by working on their own learning plan at their own pace and that students are excited about the lessons (Christensen & Horn, 2008; Lips, 2010).

Some of the reasons high school students registered in virtual schools was to enroll in Advanced Placement courses not accessible at their school, to retake failed classes, and to enroll in remedial classes to fulfill graduation requirements (Pape, 2005;

Tucker, 2009). Florida Virtual School's motto, "anytime, anyplace, any path, and any pace emphasizes the school's flexible and mastery-based approach to learning" (Tucker, 2009, p. 14). Students were able to enroll and begin their coursework throughout the semester so that students could proceed at their own learning pace (Tucker, 2009).

Keeping students engaged and motivated in lessons or a learning environment is a challenge for all educators and administrators. Modern students are connected to the technology world; they are already accustomed to a world of social interaction via the Internet and instant messaging (Christen, 2009; Jukes et al., 2010). Students' learning environment should mirror the outside world (Christen, 2009). Students should expect to be taught real-world activities, and not have to turn off their real-world living as soon as they walk into the classroom (Christen, 2009, Jukes et al., 2010; Slaughter, 2009). Students tend to get bored and tune out the lecture and learning activities of traditional schools (Christen, 2009). Engel (1994) stated that students perceived their lack of participation and involvement in lessons to be connected to too many of the lessons being lecture-based and dull. Students stated that they were unengaged in class, failing to complete their work, failing to do their homework, and eventually falling behind, skipping class and ultimately dropping out (Engel, 1994).

The engagement theory is proposed to be a theoretical structure for computer supported education and instruction (Kearsley & Shneiderman, 1998). Through computer-supported education and instruction students are actively involved in their own learning, and all classroom lessons involve intellectual procedures, such as project based lessons, problem-solving, critical thinking, decision making and assessments (Kearsley &

Shneiderman, 1998). Technology is used to introduce students to the real-world experiences, along with creating a genuine educational experience for the learners (Slaughter, 2009). Furthermore, students are inherently inspired to learn as a result of the essential learning structures, learning activities and teaching modalities (Kearsley & Shneiderman, 1998). However, teaching students how to study during online sessions is imperative to the success of online students (Lim, 2004). Thus, students who are more engaged in the course of study will learn more throughout the semester (Kennedy, 2000; Lim, 2004).

“By engaged learning, we mean that all student activities involve active cognitive processes, such as creating, problem-solving, reasoning, decision-making, and evaluation. In addition, students are intrinsically motivated to learn due to the meaningful nature of the learning environment activities” (Kearsley & Shneiderman, 1998, p. 20).

Kearsley and Shneiderman (1998) explain collaboration and project based learning are key elements to the engagement theory. “The three components summarized by Relate-Create-Donate, imply that learning activities: (1) Occur in a group context (i.e., collaborative teams): (2) are project based; and (3) have an outside focus” (Kearsley and Shneiderman, 1998). The related component refers to teaching students to successfully collaborate with their classmates online and through the Internet (Kearsley & Shneiderman, 1998). Modern online courses offer a variety of collaborating tools, such as; podcasts, whiteboards, online communities and wikis (Ramaswami, 2009). The collaboration phase can be used increase a student’s desire to learn; through

collaboration students will have the capabilities to converse and problem solve with others who could have different backgrounds (Christen, 2009; Kearsley & Shneiderman, 1998). These differences could come from different cultures and religious and racial backgrounds (Kearsley & Shneiderman, 1998). In an online environment the teacher and students can come from different states and even different countries, making the collaboration educational and real world (Kearsley & Shneiderman, 1998; Lips, 2010). The use of e-mail, online conferencing, web databases, whiteboards, and audio and video conferencing extensively enhances the amount and ease of communication and exchanges between participants (Kearsley & Shneiderman, 1998; Ramaswami, 2009; Tucker, 2009). Students who know how to utilize online tools and technology can capitalize on their learning by communicating with their instructors on a regular basis; therefore, online learning can enhance student engagement and improve education (Kennedy, 2000).

For students to experience success the teacher or instructor must be trained and understand their role in the online learning environment (Lim, 2004). It is crucial that teachers play an essential part in their student's educational experience every day (Ash, 2009). When delivering online instruction to their students, instructors have to find the time to develop relationships with their students, since they will not physically meet their students during the term (Ash, 2009). Kennedy (2000) conducted interviews with several colleagues who taught college-level online courses. According to Kennedy (2000), the common theme was that most faculty members were surprised at how well they were able to get to know their online students through e-mail. Participants also mentioned that they



built a better relationship with their online students than their direct instruction students (Kennedy, 2000).

Instructors have to engage students with the curriculum, ensure students stay on track, and provide overall monitoring student progress (Ash, 2009; Tucker, 2009).

Online teachers should be comfortable and zealous about the use of technology and the benefits it can have on student achievement (Ash, 2009). Educators have the ability to enhance their knowledge and expertise by collaborating with their peers online and utilizing the numerous resources available online (Christen, 2009). Due to the amount of change and the extent of information that is produced over the Internet, online teachers have to be comfortable with the change process (Ash, 2009). Technology is ever changing; therefore, teachers are required to be adaptable to change (Ash, 2009).

Only those highly qualified teachers who utilize a number of innovative teaching strategies when they work with their students should be recruited and employed; this will give students who have never had high quality teachers an opportunity to learn from the best (Lips, 2010; Tucker, 2009). Quinn and Quinn (2002) stated that teachers at Reuther were handpicked to work and teach at-risk alternative students. The teacher shortage can also be addressed through online learning (Lips, 2010). Teachers should continue to utilize a number of strategies to reach their students; some have utilized a virtual whiteboard session, live one-on-one or small group sessions, asynchronous discussions and immersive online gaming for their courses (Tucker, 2009). The use of computer education has the ability to make the teacher a better mentor or instructor, bringing

superior resources into the classroom and altering the teaching to fit the individual students (Christen, 2009).

There are a number of commercial companies that specialize in online learning curriculums as well as virtual schools. Florida's Virtual School is one of the leading virtual instructional facilities in the country (Tucker, 2009). "In the 2008-09 school year, approximately 84,000 students will complete 168,000 half-credit courses, a 10-fold increase since 2002-03" (Tucker, 2009, p. 13). Online learning is improving education while decreasing the cost of instruction, thus reducing the cost of education for taxpayers (Arnoldly, 2008; Lips, 2010).

Most of the new online credit recovery courses are delivered via the Internet, through programs offered by virtual and commercial curriculum companies (Lips, 2010; Trotter, 2008). These courses have been devised to accommodate the curricular needs of the learners, and tailored towards the students' learning style (Trotter, 2008). This also offers an individualized learning approach to education and is an enhancement for students (Lips, 2010; Trotter, 2008). Some of the companies specializing in online curriculum include Apex Learning, Plato Learning and the A+LS offered by the American Education Corporation (Trotter, 2008). Leaders in these companies have widened their courses to include the credit recovery option, to entice students to stay in school as well as to recruit dropouts back to the educational system (Trotter, 2008). The Apex Corporation is better known for the advanced placement courses. Apex leaders have had to increase their program of study to include credit recovery and dropout recovery courses (Trotter, 2008). Plato Learning leaders have increased curriculum

offerings from math and literacy courses to include more extensive course offerings for credit recovery, remediation, and dropout recovery (Trotter, 2008). Enrollment in online classes or virtual schools reached as high as 1 million students during the 2007–2008 school year; a 47% increase over the 2005–2006 school year (Lips, 2010). Lips (2010) “Today, 27 states offer statewide virtual schools that allow students to take a class online, and 24 states and the District of Columbia offer students the opportunity to attend a virtual school fulltime” (p.2). Enrollments in virtual school and online classes have increased for reasons including the availability of Advanced Placement courses, home schooling, credit recovery and courses not offered (Trotter, 2008).

Carver and Lewis (2010) found that 10,300 school districts operated alternative schools and courses for at-risk students in the United States during the 2007–2008 school year. Of these, 37% were operating out of the same building as the regular school (Carver & Lewis, 2010). It was also shown that of students who attended a district-administered alternative program, 17% utilized distant learning methodologies and instructional techniques (Carver & Lewis, 2010).

Members of Florida State University conducted a survey on the Plato computer-based educational system (Brown, 1981). During the 1978–1979 school year Florida State University researchers conducted a field test utilizing three Florida high schools; a suburban, an urban and a rural population school (Brown, 1981). Brown (1981) found that, on average, students utilizing the Plato system had a 1.34 grade equivalent increase in math (Brown, 1981). Overall, of the 207 students who showed a positive grade equivalent, 18 had a negative grade equivalent and 11 showed no gain; this was measured

from a pre-test to the post-test in the math curriculum (Brown, 1981). The student on average participated in approximately 22 hours of Plato online curriculum (Brown, 1981).

The A+LS is a solution for credit recovery, remediation, and alternative education and will make available curriculum content to complement teacher instruction (American Education Corporation, 2006). A+LS designed programs of study are formulated around individual state, federal, and district standards, allowing teachers to utilize the formative tests to measure students' academic achievement progress related to state standards (American Education Corporation, 2006; Kemp, 2005). This ensures that teachers have a program that will give students the individualized attention they need, while meeting state and federal requirements enacted by NCLB (American Education Corporation, 2006).

Learning is cumulative with A+ LS, all curricula uses and builds on skills learned in the previous course (American Education Corporation, 2006). A+LS provides students with automatic lessons for individualized learning (Kemp, 2005). Once students have completed all of the modules within a course, they complete and submit the mastery test electronically; grading is completed electronically, allowing teachers to track all of their students (Kemp, 2005).

The delivery of curriculum is consistent throughout all grade levels, using a direct instruction method that consists of studying the material, working practice exercises, taking a mastery test, and finally showing assimilation of the

information and skills through an activity or essay. (American Education Corporation, 2006, p. 2)

Students utilizing A+LS make use of the learning module and study guide to learn the necessary concepts prior to taking the practice test (Kemp, 2005). Assessments and lessons can be devised to be either static or adaptive (American Education Corporation, 2006). In the static mode, there are a fixed number of questions, while in the adaptive mode, the student's rate of learning depends on how they answer the questions; they will travel up or down the level of questions based on their knowledge base (American Education Corporation, 2006). Students are encouraged to take notes throughout the lesson to use while taking the practice test (Kemp, 2005).

Trautman and Lawrence (2004) conducted a quantitative study on the A+LS at the Continuous Advancement placement Program (CAPS) located on the campus of Wichita Falls High School. The researcher utilized a comparative study in which they compared the CAPS program to the regular high school. Results of the study showed that students enrolled in the CAPS program earned approximately twice as many credits: 10 compared to regular education students' completion rate of 4.47 (Trautman & Lawrence, 2004). The attendance rate for the students in CAPS was 96.5% compared to 93.7% at the regular high school (Trautman & Lawrence 2004).

### *Prevention Programs*

There is an array of different types of alternative programs serving students who have failed at traditional schools. Alternative education was based on the initiative that a number of students may flourish in a setting structured and designed differently than

traditional high schools (Kim & Taylor, 2008). With approximately one-third of the nation's youth dropping out of school, there is a need to find alternatives and prevention programs, such as tutoring or transition programs, in traditional schools that will make at-risk students successful and graduate from the regular high school (Somers & Pilawsky, 2004).

In one of the programs, a proposal was presented to increase student learning and decrease the dropout rate is the response to intervention program. This was designed to provide high quality education and interventions matched to the student's individual needs (Buffum et al., 2009; Pereles et al., 2009). The program is intended to provide all students with the chance to participate in academic and behavioral interventions (Gerzel-Short & Wilkens, 2009). The program is comprised of frequent monitoring of students to instill changes made in a timely manner with the student's education or goals, to ensure the students are academically successful at high levels (Buffum et al., 2009; Pereles et al., 2009; Wertz, Lamberts, & Carpenter, 2009). The program is designed to ensure all students receive interventions at the lowest level, to become academically successful (Tier 1). Once a student is perceived to not be responding to the interventions those students will be moved systematically to an increased level of intervention, Tier 2 to Tier 3, to ensure students are learning at grade level (Buffum et al., 2009; Pereles et al., 2009; Wertz et al., 2009).

Once a student fails to respond to the interventions in Tiers 1, 2, or 3, they may be referred to special education (Buffum et al., 2009). " RTI promises to more accurately determine special education eligibility and may provide many more students with early,

diagnostic, systematic and explicit intervention ” (Buffum et al., 2009, p. 20). RTI can be utilized to distinguish between unsuccessful teaching or teaching styles and the student’s learning disability, therefore, taking the blame away from the student and placing the responsibility on the teacher and the educational system (Gerzel-Short & Wilkins, 2009). Tier 1 is considered to be the core program; this refers to the schools’ primary educational practices. This is the instruction and experience every student receives on a daily basis (Buffum et al., 2009). Some ways to improve core programs include differentiating instruction, determining power standards, analyzing assessment data, ensuring high quality teaching and staff development, and maximizing instructional time (Buffum et al., 2009). Tier 1, which includes access to the general education curriculum, should meet the needs of at least 75% to 80% of the school’s populace (Buffum et al., 2009; Pereles et al., 2009).

Tier 2 is referred to as the supplemental level; students who fail to achieve at Tier 1 are identified as needing additional time and specific interventions (Buffum et al., 2009; Wertz et al., 2009). The purpose of Tier 2 is short-term instructional sessions for small groups of students who require extra assistance help (Brozo, 2009). Some of these students may have failed to learn the material or failed to try (Buffum et al., 2009). Teachers provide students with more intense and frequent instruction throughout Tier 2 (Wertz et al., 2009). The needs of these students are considerably different; the interventions should be designed to meet the academic needs of at least 15% of the student body (Gerzel-Short & Wilkins, 2009; Pereles et al., 2009). Some examples of

Tier 2 interventions are mandatory study hall, study skills classes, tutoring, frequent progress reports, and goal setting (Buffum et al., 2009).

Students, who fail to respond to tiers 1 and 2, will then be moved to tier 3, which is considered the most intensive level of the pyramid (Buffum et al., 2009). Tier 3 is used to provide students with individualized, specialized, and one-on-one learning opportunities (Wertz et al., 2009). Tier 3 interventions are designed to be intensive and frequent enough to allow students ample opportunity to catch up to grade-level expectations and close the achievement gap, therefore, ensuring these students are successful in school (Buffum et al., 2009).

Wertz et al. (2009) conducted a quantitative survey of 119 special education directors in 117 Ohio school districts regarding the RTI program. The researchers determined that RTI is on the rise in education, but experts have yet to determine what the program will look like (Wertz et al., 2009). The researchers concluded that the issues that seemed most pressing to the directors were training and personnel issues connected to parents and teachers (Wertz et al., 2009).

Other prevention programs are aimed at making students successful and reducing the dropout rate include supplying early childhood education for all families, discovering ways to track and identify potential dropouts, developing student transition programs for middle and high school individuals, developing a guaranteed and viable curriculum that is individualized with a career-learning component for all students, making sure positive relationships are established between the students and staff, and work to develop alternative education options for the students who are at-risk of withdrawing from school



early (Pennsylvania State Education Organization (PSEA), 2010). De La Rosa (1998) reported the New Directions Academy philosophy” is to place the student first and academic concerns second. Staff members are determined to do ‘whatever it takes’ to enable the students to believe in themselves, and they use varied resources to help students complete their education” (p. 3). At-risk students need to be identified and provided interventions. This is one method used to deal with the dilemma of academic underachievement; intervention tactics can boost intellectual performance in the classroom (Spencer, 2009). One intervention technique that has shown to be effective with at-risk students is academic tutoring (Somers & Piliawsky, 2004). Research showed that before and after school tutoring can be a successful intervention strategy to help students understand and grasp the fundamental concept of classroom assignments (Somers & Piliawsky, 2004). De La Rosa (1998) mentioned at New Directions Academy, the students are to conference with their teachers on a weekly basis, along with requesting tutoring help if they are struggling in any of their classes.

Somers and Piliawsky (2004) conducted a research study to determine if tutoring was a successful strategy in preventing school failure and dropout prevention programs. The researchers chose 96 ninth graders, 99% African American individuals from the lower socioeconomic status group (Somers & Piliawsky, 2004). The study was comparative and had an experimental group and a control group (Somers & Piliawsky, 2004). Somers and Piliawsky (2004) found one intervention technique effective with at-risk students included before and after school academic tutoring, which was used to help students understand and grasp the fundamental concept of classroom assignments.

Spencer et al. (2009) conducted a peer tutoring study consisting of 9 students between 2001 and 2007. The students were enrolled in elementary, middle, and high school and were diagnosed with an emotional behavior disorder. The researchers discovered that, at the elementary level, when the students with emotional behavior disorder were the tutors, reading levels increased, but the findings and behavioral improvements were unseen (Spencer et al., 2009). The middle school data showed that students preferred this type of instruction, and there were gains in academics; however, high school students showed both positive academic and classroom behaviors (Spencer et al., 2009). Therefore, academic peer tutoring is a valuable intervention approach for at-risk students (Spencer et al., 2009).

Somers and Piliawsky (2004) found that students' grade point averages did not change for any of the students studied, but the basic goal of keeping students from dropping out of school was increased in the experimental group. There was a 7.7% dropout rate for students who completed the tutoring program, a 13% dropout rate for the entire school and a 15% dropout rate for the entire district (Somers & Piliawsky, 2004). Therefore, at-risk students need to be identified and given interventions (Somers & Piliawsky, 2004).

### *Summary*

Online education is one avenue available to educate at-risk students. Motivating at-risk students is essential to ensuring they are academically successful and that they achieve their high school diploma. Motivation can be either intrinsic or extrinsic; extrinsic motivation comes externally, while intrinsic motivation comes internally, and

the assignment itself is interesting or appealing enough to complete the task (Christensen et al., 2008). With the surge in technology, students in 2010 are hyper-connected (Christen, 2009). Technology and teacher preparation must be enhanced to ensure students of the 21st century are successful (Christen, 2009). Christensen et al. (2008) estimated that at least 80% of a teacher's time is spent in monumental activities, such as organizing their lessons, instruction, and class assessment; less than 20% of a teacher's time is available to help students individually (Christensen et al., 2008). Administrators should constantly work to improve academic achievement levels (Pereles et al., 2009). They should also instill instructional methodologies that will ensure academic success for all students (Pereles et al., 2009).

Researchers have shown the three most influential reasons student dropout of school to be family, socio-economics, and school factors (PSEA, 2010). The most effective way to keep students in school and ensure they graduate is to reengage them with the learning process. School districts administrators must find ways to do this and lower the dropout rate, therefore helping close the achievement gap. The research instruments developed by the researcher can be used to examine the perspectives of students and teachers regarding the implementation of the A+nyWhere Online Learning System curriculum. In the following chapters, the data collection instruments will be aligned with the literature review.

### Chapter Three: Research Methodology

Chapter 3 describes the procedures used during the research process which included research questions, hypotheses, the research perspective, a description of study participants, the instruments utilized, the procedures that were followed and how the data were analyzed throughout the study. The issues of bias and internal validity are also considered in this chapter, as well as a justification of the methodology used.

#### *Research Overview*

The main research question for the study was, to what extent does implementing the A+LS online instruction in an alternative high school increase academic achievement, increase attendance, and decrease the dropout rate? The study was designed to determine if the A+LS was a motivational tool and a successful instructional strategy for at-risk students, thus improving students' overall attendance and academic achievement percentages, while decreasing the alternative school's dropout rate. The study was used to compare 2008–2009 school year statistics, when students were taught using direct instruction by highly-qualified teachers, to the 2009–2010 school year statistics when the A+LS was implemented to teach students science, mathematics, language arts, history, government, health, personal lifetime fitness, and some elective courses such as personal finance, art history and introduction to business.

For the purpose of the study, a mixed method was utilized. Johnson and Onwuegbuzie (2003) defined mixed method research “as the class of research where the researcher mixes or combines quantitative and qualitative research techniques, methods, approaches, concepts or language into a single study” (p. 17). It was hoped that the

mixed method used in the study would lead to an increase in understanding of the research inquiry, since both the quantitative data and qualitative data were studied to determine the results and conclusions of the data (Fraenkel & Wallen, 2006). It was also hoped that the mixed method approach of the study would lead to a deeper understanding of the research question and provide more reliable results (Frankel & Wallen, 2006). A mixed method of research can be used to add knowledge and understanding to the study that may otherwise have been overlooked (Johnson & Onwuegbuzie, 2004). According to Johnson and Onwuegbuzie (2004), “qualitative and quantitative research used together produce more complete knowledge necessary to inform theory and practice” (p. 21). A mixed method approach will give a more complete picture and deeper understanding of the effectiveness and perceptions to the implementation phase of the A+LS.

### *Research Design*

In a review of 57 mixed method studies, Green, Caracelli, and Graham (as cited in Rocco, Rocco, Bliss, Gallagher, & Perez-Prado, 2003,) “identified and gave examples of evaluation projects that demonstrated five purposes for adopting mixed method design strategies; triangulation, complementarity, development, initiation and expansion” (p. 22). The mixed method triangulation design was chosen to be utilized throughout the study (Fraenkel & Wallen, 2006). In a triangulation design, data were collected while simultaneously utilizing both quantitative and qualitative data (Fraenkel & Wallen, 2006). The data was then compared to corroborate each method (Fraenkel & Wallen, 2006). In the research, a quantitative survey utilizing a Likert scale was given to students and a qualitative interview was conducted with 12 students. Quantitative data from the

alternative school were collected for number of absences, number of credits earned, and number of students graduating early. The research design was projected to explore the effectiveness of implementing the A+LS curriculum in an urban alternative high school.

The data collection process consisted of the components shown in Table 1.

Table 1

*Data Collection Time Frame*

Data Collected	Date Collected	Provided by
08–09 Student attendance records	June 29, 2010	Principal
09–10 Student attendance records	June 29, 2010	Principal
08–09 Student academic records (Credits)	June 29, 2010	Principal
09–10 Student academic records (Credits)	June 29, 2010	Principal
08–09 Number of student dropouts	June 29, 2010	Principal
09–10 Number of student dropouts	June 29, 2010	Principal
08–09 Number of students who applied for early graduation	June 14, 2010	Director of Alternative Learning
09–10 Number of students who applied for early graduation	June 14, 2010	Director of Alternative Learning
Student and Staff Interviews	March 5 and 22, 2010	Researcher
Student Surveys and Observations	March 5 and 22, 2010	Researcher

The researcher explored a program that was implemented during the 2009–2010 school year and was new to the district. As a result, an evaluative research study was conducted (Simon & Francis, 2001). According to Glatthorn and Joyner (2005), the purpose of the research is evaluation based. Evaluation research creates decisions regarding the value or significance of the instructional course of study, instructional products and the learning institutions. This could be a formative study or a summative study; a formative study occurs while the program is being developed or is underway, while a summative study takes place at the end of the program (Glatthorn & Joyner, 2005). The researcher conducted the study at the beginning stages of the A+LS implementation phase. The alternative school is a credit recovery school that offers a four-semester program, with a focus on credit recovery. The A+LS had been implemented for three semesters prior to the beginning of this research. The school year began in August of 2009, and the interviews and surveys were conducted in March of 2010. The teachers and staff had received some of their professional development from the American Educational Corporation, but were still scheduled to receive more training during the time frame in which the study was conducted. The quantitative data were collected at the end of the 2010 school year at the end of the first year of implementation of the A+LS.

#### *Research Hypothesis and Research Questions*

In the study, the following hypotheses were addressed:

**RQ 1.** What impact do the students and teachers think the implementation of A+LS has on the alternative school environment?

**RQ 2.** What impact did the implementation of the A+LS have on student achievement, student attendance, and the alternative school dropout rate?

**RQ 3.** Do students and teachers perceive the A+LS curriculum to be challenging and rigorous enough for the students? Did the online curriculum prepare the students for the future?

**H<sub>1</sub>.** Implementation of the A+LS through the use of online instruction with at-risk students in an alternative high school will increase academic achievement, as measured by a comparison of the number of course credits earned before implementation to the number of course credits earned after implementation.

**H<sub>01</sub>.** Implementation of the A+LS online instruction with at-risk students in an alternative high school will not result in an increase in academic achievement as measured by a comparison of the number of course credits earned before implementation to the number of course credits earned after implementation.

**H<sub>2</sub>.** Implementation of the A+LS online instruction with at-risk students in an alternative high school will result in an increase in student attendance rate, as measured by a comparison of the attendance rate before implementation to the attendance rate after implementation.

**H<sub>02</sub>.** Implementation of the A+LS online instruction with at-risk students in an alternative high school will not result in an increase in student attendance rate, as measured by a comparison of the student attendance rate before to the student attendance rate after implementation.



**H<sub>3</sub>.** Implementation of the A+LS online instruction with at-risk students in an alternative high school will decrease the dropout rate at the alternative school as measured by a comparison of the dropout rate before to the dropout rate after implementation.

**H<sub>03</sub>.** Implementation of the A+LS online instruction with at-risk students in an alternative high school will not result in a decrease in the dropout rate at the alternative school as measured by a comparison of the dropout rate before implementation to the dropout rate after implementation.

**H<sub>4</sub>.** Implementation of the A+LS with at-risk students in an alternative high school will cause an increase in the amount of early graduation applications, as measured by a comparison of the early graduation applications prior to the implementation of the A+LS.

**H<sub>04</sub>.** Implementation of the A+LS with at-risk students in an alternative high school will not cause an increase in the amount of early graduation applications, as measured by a comparison of the early graduation applications prior to the implementation of the A+LS.

*Dependent and Independent Variables and Internal Validity*

The dependent variables in the study were the number of days absent, the number of dropouts, the number of credits earned, the number of early graduates, and the perceptions of the students and teachers concerning the use of the A+LS. The independent variable was the use of the A+LS. According to Frankel and Wallen (2006), internal validity, “means that observed differences on the dependent variable are directly

related to the independent variable, and not due to some other unintended variable” (p. 169). A number of threats to internal validity exist that, if not controlled for by the researcher, can cause skewed data. To prevent the threat to internal validity careful consideration must be made of all aspects of the study (Frankel & Wallen, 2006). This includes administration of the surveys and interviews, the collection of all data and the treatment of the data. There was concern about the selection of participants and their history of attending the alternative school the previous year. As a result, only four staff members from the previous year were still at the school at the time of the study. The students were also accustomed to direct instruction and more project based lessons. The implementation of the A+LS online instructional program was another change for the students and was the researcher’s main concern.

Loss of subjects (mortality) was a concern due to the high number of students who had already completed the required number of high school credits during the time of the research. However, this was also seen as a positive for the program since these at-risk students graduated early from high school as a result of earning their academic credits at an accelerated rate. Another mortality situation was student absenteeism; a few students were absent on the three days of data collection and thus could not participate in the study.

To reduce the location risk, all the interviews were conducted in the teachers’ lounge. Maturation was a concern due to the summer break, and there was concern that the participants may change emotionally over summer break until to the time the research study was concluded. In maturation, “participants naturally change over time; these

maturational changes, not treatment, may explain any changes in participants during the experiment” (Brogan, 2007, para. 7). Thus, any improvement in quantitative measures may be due to maturation rather than the online program, although interviews were chosen as a method of data collection to gain the students’ perceptions.

Regression threat was a concern because of the implementation dips that occur with change. According to Fullan (2004), “the implementation dip is a dip in performance and confidence as one engages in an innovation that requires new skills and new understandings” (p. 49). Students were accustomed to direct instruction, and eight students at the beginning of the school year either dropped out or transferred back to their traditional school due to the implementation of the A+LS.

Instrumentation threat was also a concern for the researcher due to the construction of the survey and interview instruments utilized throughout the study. Instrumentation is discussed later in this chapter. Every effort was made to minimize the internal validity threats throughout the research study. The researcher conducted the study to minimize the chances of internal validity affecting the outcome.

### *Instrumentation*

Researchers design surveys to uncover the subjective feelings of the public about a topic or survey area (Fowler, 2002). “A survey is a system for collecting information to describe, compare, or explain knowledge, attitudes, and practices or behaviors” (Fink, 1995, p. 1). The rationale of a survey is to explain the perceptions of the research group (Fraenkel & Wallen, 2006).

The researcher designed the survey instrument used in this study and examined the reliability and validity of the instrument. Prior to the study, the research instrument was sent to a content validity panel, consisting of a university professor, a high school administrator, and a superintendent of schools. The comments of the reviewers were valuable in ensuring the validity and reliability of the study and eliminating bias within the instrument. The researcher checked the readability statistics in Microsoft Word; the Flesch Reading Ease was analyzed at 44.8, and the Flesch-Kinkade Readability was analyzed at a grade level of 12.1. The students were all high school seniors in their fourth or fifth year of school. Therefore, the readability of the survey was on grade level.

*Suggested changes to the survey*

The researcher received valuable suggestions on the survey instrument from the content validity panel. One member of the panel suggested changing the Likert scale from 4 to 5 and gave advice on the wording of the responses. There was also a concern that there were too many questions for the at-risk population and some suggestions on the wording and tone of the questions. After revisions, the survey instrument was approved by the university's Institutional Review Board.

The second instrument utilized to gather qualitative data was a personal interview. The advantages of conducting a personal interview over using a questionnaire include the following; interviews eliminate misinterpretation of questions, participants can ask for clarification of questions they do not understand, interviews may encourage a relaxed environment where questions can be asked, and the interviewer can see and interpret the body language of the participant as an additional source of information (Simon &

Francis, 2001). Some of the disadvantages of completing an interview versus sending out surveys or questionnaires include that a large number of individuals can be surveyed in a shorter time frame, interviewer bias can cause reliability issues during an interview, and there can be problems analyzing the data from an interview (Simon & Francis, 2001).

The interview questions were designed by the researcher with the help of two university professors. With their professional advice, the researcher utilized information from the literature review to devise the questions and provide support through published research and existing studies. Other suggestions were made regarding the number of questions being asked, the content, confidentiality, and adding the neutrality of the wording on both surveys. The researcher supported each of the questions with research from the literature review in chapter 2.

The surveys and interviews were used to gather participants' insights, understanding and perceptions, which were important elements of the research study. One of the research questions in the study was written to determine how participants perceived the implementation of the A+LS, the data gathered because it was essential for the completion of this research study. While the first two research questions were examined using quantitative data, the surveys, observations and interviews that demonstrated participants' perceptions regarding the implementation of the A+LS were included in the triangulation of data collected.

The third, qualitative methodology utilized to gather qualitative data was participant observations. Participant observations refer to the collection of data by an observer over a period of time long enough to observe the participants involved in the

observed behavior (Bloland, 1992). During observations the researcher records and takes notes on the observed behaviors (Bloland, 1992).

*Qualitative instrument alignment*

The researcher designed the survey interview instruments to determine if the A+LS online instruction program increased student motivation to education, thus increasing academic achievement, increasing attendance, and decreasing the dropout rate. While analyzing the literature, a number of reasons why students drop out of school, warning signs, and what schools and districts could do to ensure the success of at-risks students were discovered. The researcher focused on the following literature research categories to design the questions; rigor of the A+LS, motivation, attendance, academic achievement, and dropout prevention. A full version of the interview and survey instruments can be found in Appendices A and D. Student Interview and Student and teacher Survey Questions (IQ = Interview Questions; SSQ = Student Survey/Teacher Survey)

IQ1. Has the A+LS online instruction changed your interaction with your teachers?

Teachers have an essential role in the online learning process. Teachers have to understand how to employ the most effective learning strategies, enhance student involvement, and engage the students in the learning process (Lim, 2004). The teachers learn how to become excellent facilitators (Lim, 2004).

IQ2: Do you perceive that the A+LS online instruction has motivated you to

make consistent grade improvement in school so you could pass more classes and earn more credits? If so, how? Why or why not?

The chief executive officer of the North American Council for Online Learning stated that, “when students have struggled, and online learning opens up new pathways to success, they can find alternative ways to learn and to graduate, while also developing new skills for success in life” (Watson & Gemin, 2008, p. 16).

SSQ3: The implementation of the A+LS online instruction increased my effort to earn more credits.

In student interviews at Prairie View alternative high school, Kim and Taylor (2008) discovered that students found the A+LS a positive experience. They were extremely happy to be earning the credits they needed to graduate high school (Kim & Taylor, 2008).

SSQ8: My learning increased more with the A+LS online instruction than when I was taught utilizing the direct instruction method.

Most online schools that provide credit recovery and work with at-risk students do not provide a noteworthy amount of in-person teaching time. Students communicate with their teachers for the most part via the Internet (Watson & Gemin, 2008). The combined approach is significant because it offers more student support and personal contact at certain times during the semester (Watson & Gemin, 2008). The online element, irrespective of whether it is a fully online course or a combination of online and face-to-face teaching, provides student an opportunity to learn a 21st-century skill as (Watson & Gemin, 2008).

IQ3: Do you perceive the A+LS online instruction easier, harder or the same level of difficulty as direct instruction? Why or why not?

Many teachers and administrators understand online lessons can create a diverse type of learning environment (Watson & Gemin, 2008). These programs also can be used to offer students a rigorous curriculum, challenging student at their own pace and offering a new and innovative learning style (Watson & Gemin, 2008).

SSQ2: The A+LS online instruction was challenging.

According to Prabhu (2008), the University of Indiana researchers conducted a survey of online learners and discovered that students reported deeper approaches to education than direct instruction based learners.

According to survey results, 37 percent of first-year online learners and 45 percent of seniors said they participated in course activities that challenged them intellectually ‘very often,’ compared to only 24 percent of first-year classroom-based learners and 35 percent of seniors. The survey also found that online learners reported slightly more deep approaches to learning in their coursework. (Prabhu, 2008, para. 8).

SSQ7: My level of knowledge increased due to the delivery method of the A+LS online instruction

Online learning for the most part is appropriately matched to students who are credit deficient (Watson & Gemin, 2008). This provides for individualized instruction and self-paced programming (Watson & Gemin, 2008). Online curriculum should be rigorous and linked to district and state standards (Watson & Gemin, 2008). A rigorous



curriculum is used to ensure students are learning the curriculum and working through the coursework (Watson & Gemin, 2008). Online curriculum should include a series of tests to ensure students have mastered the material. Testing should include formative (pretest), chapter tests, and a summative (post) test (Watson & Gemin, 2008).

IQ4: Do you perceive the A+LS online instruction has increased your motivation to attend school more this year than last year? If yes, how? Why or why not?

Motivating students who are at-risk of dropping out of school is a goal of alternative programs (Watson & Gemin, 2008). The flexibility and self-paced option of online learning can be a motivator for at-risk students (Watson & Gemin, 2008). Online classes can also be more engaging than traditional direct instruction courses for at-risk students (Watson & Gemin, 2008). The flexibility of online education can predominantly help learners who have extreme difficulties in their instruction, such as those students who tend to move frequently during their educational years and therefore fall behind in their education (Lips, 2010).

SSQ5: The implementation of the A+LS online instruction motivated me to attend school on a more consistent basis than when I was taught to be a teacher who utilized direct instruction teaching method.

“Students can receive instruction at their own pace and in ways tailored to their unique learning styles and interests. Increased customization can make the learning process more enjoyable and productive” (Lips, 2010, p. 4). This removes the tradition of disappointment that becomes customary for at-risk students in the traditional schools

(Watson & Gemin, 2008). Online courses allow students to take a pretest and test out of material familiar to them, allowing them to move through courses more quickly. As a result, academic credits are earned at an increased rate due to the ability to be on an individualized learning plan (Watson & Gemin, 2008).

SSQ4: Learning with the A+LS online instruction was enjoyable.

Online learning can be a motivational tool for at-risk students (Watson & Gemin, 2008). Students may become more engaged in online learning courses than traditional direct instruction classes (Watson & Gemin, 2008). This is because of the flexibility and self-paced nature that the use of online learning can offer students (Watson & Gemin, 2008).

IQ5: Do you perceive the A+LS online instruction is preparing you for a transition to work, college, trade school? If yes, how? Why or why not?

Students can take courses to help them develop skills to become lifelong learners, giving them opportunities to study topics in detail (Pape, 2005). Online learning can be used to develop independent learning skills and teach students how to manage their time (Pape, 2005). The design of online courses ensure the intent is to enhance student's knowledge of the Internet, e-mail and computers, and to develop their ability and work practice that will enable them to continue in their academic endeavors or into the work force (Trotter, 2008). According to Wolf and Barzilliai (2009), an early engagement in online reading can strengthen certain cognitive skills such as multitasking.

SSQ1: The A+LS online instruction prepared me for college and/or the workplace.

Students can take courses that are important to them and their interests (Pape, 2005). These courses are also important to their educational and career goals (Pape, 2005). These courses are used to give them an opportunity to become self-sufficient learners, manage their time, and learn occupational topics (Pape, 2005).

SSQ6: The implementation of the A+LS online instruction encouraged me to stay in school and work towards my high school diploma.

An all-inclusive move towards dropout prevention is focused on keeping students in school and guarantees the time spent in the classroom is engaging for students (Bhanpurih & Reynolds, 2003). Time in the classroom should be engaging, meaningful, and useful (Bhanpurih & Reynolds, 2003). This also puts focuses on assuring students are motivated to learn (Bhanpurih & Reynolds, 2003).

SSQ9: I would recommend the A+LS online instruction to anyone who is thinking of dropping out of school.

The CEO of North American Council for Online Learning stated that, “when students have struggled, and online learning opens up new pathways to success, they can find alternative ways to learn and to graduate, while also developing new skills for success in life” (Watson & Gemin, 2008, p. 16).

The teacher interview questions that were answered during the study include:

IQ1: Has the A+LS online instruction changed your interaction with the students?

Teachers play a very important role in the online learning process (Lim, 2004). Teachers have to understand how to employ the most effective learning strategies,

enhance student involvement, and engage students into the learning process. Teachers have to learn how to become excellent facilitators (Lim, 2004). Kennedy (2000) found that college professors built better relationships with their online students than their on-campus students.

IQ2: Do you think the A+LS online instruction has motivated your students to make consistent grade improvements in school so they could pass more classes and earn more credits? If so, how? Why or why not?

For the most part, online learning is appropriately matched for students who are credit deficient (Watson & Gemin, 2008). This is because it permits individualized instruction and self-paced programming (Watson & Gemin, 2008). Online curriculum should be rigorous and linked to district and state standards; a rigorous curriculum ensures students are learning the curriculum and working through the coursework (Watson & Gemin, 2008). Online curriculum should include a series of tests to ensure students have mastered the material. This testing should include formative (pretests), chapter tests, and a summative (post) test (Watson & Gemin, 2008). The online component can be used to provide a 21st-century experience to at-risk students who traditionally have less opportunity to learn and familiarize themselves with computers and technology (Watson & Gemin, 2008). Lips (2010) stated that students who took their courses online did better as a whole than students who took their classes through direct instruction.

IQ3: Do you perceive the A+LS online instruction for your student as easier, harder or the same level of difficulty as direct instruction? Why or why not?

“Learning based on rigor, relevance, and relationship for all students is possible, and online education is one tool for school boards and administrators to use” (Pape, 2005, p. 16). Online education is utilized to learn new material that is important to the individual student (Pape, 2005). Therefore, enhancing their future academic or professional opportunities (Pape, 2005). “Through online collaboration and virtual classroom experiences, they can build relationships with students and teachers globally, learning not only curriculum and content, but also collaborative and global citizenry skills. It’s a good match for tomorrow’s learner—today” (Pape, 2005).

IQ4: Do you perceive the new A+LS online instruction has motivated the students to attend school more this year than last year? If yes, how? Why or why not?

The individualized pace of the online content removes the ‘culture of failure’ by allowing students to test out of material familiar to them from their first experience with the course, then work through content in chunks with measured success. Students experience success quickly and are engaged by the content. (Watson & Gemin, 2008, p. 11).

IQ5: Do you believe the A+LS using online instruction is preparing the students for a transition to work, college, and trade school? If yes, how? Why or why not?

According to Donlevy (2003), one of the advantages to online learning is the amount of time they are spending on technology, which increases their knowledge and understanding of technology. Ramaswami (2009) stated online students are learning self-discipline, organization skills, and time management, all of which are critical for college

and the workforce. Ramaswami (2009) also mentioned students in online schools are commenting they feel more prepared to attend college and enter the work force.

IQ6: Was the professional development you received from the district, school administration or the American Education Corporation in learning the A+LS effective?

An important aspect for incorporating A+LS into the lessons of teaching professionals is professional development (Kemp, 2005). “The increasing use of online learning will provide instructors and online learning operators with incentives to innovate and develop new learning tools that could improve students’ learning options in ways unimaginable today” (Lips, 2010, p. 5).

### *Research Participants*

The district under study had 3 early childhood centers, 10 elementary schools, 5 middle schools, 3 high schools, and 2 alternative education centers. The study site for the research was one of the district’s two alternative schools.

The participants for the study consisted of secondary students attending an alternative high school in an 18,000-student, suburban school district located in Missouri. During the first year of the study (2008–2009), the school enrolled 119 students. The participants were 10<sup>th</sup>-, 11th- and 12th-grade students between the ages of 16 to 20. The students were credit deficient upon arrival at the alternative high school.

To compare data generated before implementation of the A+LS online instruction to data generated after implementation, the population invited to participate in the study were students enrolled in the alternative high school during the 2008–2009 school year

who returned for the 2009–2010 school year. The alternative school population at the beginning of the 2009–2010 school year totaled 96 students. Forty-five students returned to the alternative school after the 2008–2009 school year. The remaining 51 students attending the alternative high school at that time were new to the school and had transferred from one of the three traditional high schools, and therefore, did not participate in the study.

The primary investigator recruited the participants through use of a letter explaining the recruitment process. The researcher discovered that the majority of the students had finished their course work early and were not required to return to school until graduation. However, they were included in the survey process, since their pending graduation was a part of the secondary data being collected. All 45 students and 4 teachers received a recruitment letter. The researcher's intention was to survey all 45 returning students using the student perspective, quantitative survey; however, only 27 participants completed the survey; with a return rate of 60%.

Participation in the interview process was voluntary. The researcher selected the first 12 students to volunteer. Students volunteered for the interview by checking a box on the recruitment letter, which was then signed and returned to the researcher. Students could choose to withdraw at any time and were not penalized if they chose not to participate or if they decided to remove themselves from the research study at a later date. The researcher ensured students under the age of 18 received a parental consent form allowing them to participate in the interview and survey process.

*Characteristics of Participants*

Study participants were secondary students attending an alternative high school in a large, 18,000-student suburban school district located in Missouri. The study site for the research was one of the district's two alternative schools. Demographics for the district and school are listed in Table 2.

Table 2

*District and School Demographics*

Ethnicity	District 2009 Population	2008–2009 Alternative School Population	2009–2010 Alternative School Population
All Students	17,632	101	96
Caucasian	88.8%	89%	85.4%
African American	6.1%	5%	9.37%
Asian	2.6%	0%	2.08%
Hispanic	2%	1%	3.125%
Native American	.02%	1%	0
Male		57.4%	57.3%
Female		42.6%	42.7

The researcher chose a purposive sampling method throughout the study. In purposive sampling “In purposive sampling, we sample with a *purpose* in mind. We usually would have one or more specific predefined groups we are seeking” (Trochim, 2006, para. 4). According to Creswell (2008), researchers select participants according to



their enthusiasm and accessibility to participate in the study. Purposeful sampling chooses studies that have a wealth of information that can be studied in detail in order to describe and provide a more complete and accurate description of the research study, however the size and specific cases depend on the study's purpose (Patton, 2002). Forty-five students returned to the alternative school at the beginning of 2009–2010 school year and were available to participate in the student survey upon giving consent. The quantitative data utilized all 45 students for the purpose of this study: 51% male ( $n = 23$ ) and 49% female ( $n = 22$ ). There were 22% ( $n = 10$ ) of the students who were 17 years of age, 51% ( $n = 23$ ) who were 18 years of age, 24% ( $n = 11$ ) who were 19 years of age, and 4% ( $n = 2$ ) who were 20 years of age. The sample was 93% Caucasian ( $n = 42$ ), 2% African American ( $n = 1$ ), and 4% Native American ( $n = 2$ ). The participants of the study were comparable in makeup to the characteristics of other student groups in the same school district.

The students who were chosen for the study were those enrolled in the alternative school during the 2008–2009 school year, in which the direct instruction model was implemented. The students returned to the alternative school during the 2009–2010 school year for the implementation of the A+LS. At the beginning of 2008–2009 school year 43 seniors, 54 juniors and 4 sophomores were enrolled in the alternative high school.

To compare data generated prior to implementation of the A+LS online instruction to data generated after the implementation phase, the population invited to participate in the study were students enrolled in the alternative high school during the 2008–2009 school year who elected to return for the 2009–2010 school year. The

alternative school had 45 students returned from the 2008–2009 school year. The remaining 51 students attending the alternative high school were new students who had transferred from one of the three traditional high schools. These 51 students were not included in the study due to being new to the alternative high school during the 2009–2010 school year. Participation in the interviews was voluntary; 12 out of the 27 students surveyed volunteered for the interview.

### *Day-to-Day Operations*

The day-to-day operations at the alternative high school changed during the 2009–2010 school year. During the 2008–2009 school year students learned by direct instruction, using the district-approved high school curriculum. The definition of direct instruction is a form of instruction calling attention to clearly organized and carefully planned lessons organized around small learning increments and clearly defined instructional tasks (Engelmann & Becker, n .d.). Direct instruction is research and theory based, where the teacher gives explicit directions and instruction. Thus, removing any misinterpretations, therefore, greatly improving and increasing achievement (Engelmann & Becker, n .d.).

During the 2008–2009 school year, the school staff included two administrators, two secretaries, two counselors, and nine full-time teachers. During the 2009–2010 school year, the alternative school adopted the A+LS. The students were taught their core classes and some electives, such as math, science, communication arts, personal finance, history, government, personal lifetime fitness, through the A+LS and utilizing an online format. Students were given the opportunity to take a few direct instruction

elective classes, such as fine arts, PE, marketing, and drama. The school staff was reduced to one administrator, a teacher leader, five teachers, one secretary, and two counselors. The role of the teacher was to give students one-on-one instruction, to ensure students were taking notes, teach proper note taking skills, check to make sure students were keeping pace in the computer-based class, proctor the class, and ensure students stayed engaged in lessons.

The school day began at 8:00 am and ended at 1:50 pm. Students had 75 minute blocks every day, with a 25 minute lunch between blocks two and three. The students worked on their computer-based lesson on their own. An individual learning plan was designed for each student, so they understood what classes they needed and the path they were on to graduate high school. Students could take up to four computer-based classes per day or combine the computer-based courses with direct instruction courses depending on their curricular needs. However, some students utilized the A+LS, which consisted of reading and writing for the entire six hour school day.

#### *Alternative High School Eligibility Criteria*

The alternative high school involved in the research project is a Type I alternative school that students chose to attend for the type of program(s) offered (Leiding, 2008). This is a true alternative educational choice (Leiding, 2008). However, housed in the same building is the Missouri Options Program.

To attend the alternative high school, the following criteria had to be met. The students were considered as sophomores, juniors, seniors or super seniors due to their age and their cohort group. A super senior is a student who has completed more than four

years of high school without graduating. The participants in this study were in their fourth, fifth and sixth years of high school. Students were lacking a number of academic credits as a result of failing numerous classes at the traditional high school; therefore, the students were required to complete an application for admission. Finally, students must have completed an interview to attend the alternative high school. The interview board consisted of the principal, a counselor, and two teachers.

#### *Data Collection and Analysis Procedures*

The researcher gathered quantitative data through contact with the principal of the alternative high school for the 2008–2009 and 2009–2010 school years. The researcher obtained academic and attendance data from the students' official transcripts; this data is discussed in further detail in Chapter 4. The final two pieces of data analyzed were the alternative high school's dropout information and early graduation requests. The 2008–2009 and 2009–2010 school year data were analyzed for the number of drop out and early graduation requests.

The researcher utilized a mixed methods study using a Likert scale, along with student and teacher interviews. During the student surveys and interviews, staff and teachers were asked to leave the room.

The data collected to determine attendance patterns were the total number of days missed during the 2008–2009 school year and the number of days missed during the 2009–2010 school year. The data collected to determine academic achievement were the total number of credits earned during the 2008–2009 and 2009–2010 school years. The researcher also compared the total number of dropouts during the same two years from

the alternative high school. The students were given a paper and pencil survey that was entered electronically into a database for quantitative data analysis and retrieval. The researcher utilized an ordinal level of measurement to generate the data (Simon & Francis, 2001). One of the most widely utilized ordinal measurements on closed questionnaires is the Likert scale (Simon & Francis, 2001). The survey uses a Likert scale with responses coded as follows: (1) *Completely Agree*, (2) *Somewhat Agree*, (3) *Neutral*, (4) *Somewhat Disagree*, (5) *Completely Disagree*. Prior to the start of the research, university professors, a high school principal and a superintendent reviewed the survey to determine the instrument's validity. The student perspective survey is included in Appendix A.

The primary investigator recruited all of the participants. All 27 students who volunteered to participate in the survey and four teachers received a recruitment letter (see Appendices B and C).

#### *Quantitative Data Analysis*

The quantitative data consisted of annual attendance numbers for the 45 participants gathered from the enrollment rosters for the alternative high school for the 2008–2009 school year and the 2009–2010 school year. The researcher obtained all of the student's transcripts from the alternative high school in order to gather the academic achievement data.

The researcher utilized the random generator at <http://randomizer.org/form.htm> to gather a true random sample of the participants. The researcher chose to take a random sample of 15 participants out of the 45 participants to achieve a true random sample of

the quantitative data. A simple random sample was deemed to be most effective for this study. The researcher chose to take a sample of 15 participants of the 45 available participants to complete the quantitative data in order to get a valid conclusion on the entire sample. The researcher utilized a confidence level of 95% for all statistical analysis. The researcher compared the participants' academic credits earned and the attendance data for the 2008–2009 and 2009–2010 school years, using a  $t$  test. Prior to completing the  $t$ , test the researcher conducted an  $f$  test to determine whether or not variances for the two sets of data were considered statistically equal. The collection of the dropout data and early graduation data for the 2008–2009 and 2009–2010 school years were from the district's central office. A  $z$  test for differences in proportions was utilized on the dropout data and early graduation data. The researcher also used a  $z$  test for proportions applied to Likert scale responses to analyze the student perspective survey,

The researcher analyzed the student perspective survey utilizing the following hypotheses:

**H<sub>1</sub>.** There is a difference between the proportion of students who agree compared to the proportion of students who disagree while answering the student perspective survey of the A+LS.

**H<sub>01</sub>.** There is no difference between the proportion of students who agree compared to the proportion of students who disagree while answering the student perspective survey of the A+LS.

Twenty- seven students participated in a paper-and-pencil student perspective, Likert scale survey, entered electronically into SurveyMonkey.com. The researcher utilized a  $z$  test for difference in proportions to analyze the results of the survey. The student perspective Likert scale survey requested the participants to respond from (1) *Completely Disagree*, to (5) *Completely Agree*, with the mid-point neutral (see Appendix A).

#### *Qualitative Data Analysis*

Twelve students volunteered to participate in a student interview consisting of five questions (see Appendix D). Four staff members remained after the 2008–2009 school year and were given information pertaining to the research project prior to participating in the interview (see Appendix E). All four eligible staff members participated in the staff interview, which consisted of six questions.

The researcher used the following process during the implementation of the qualitative data: each interview was audio recorded and extensive notes were taken by the researcher, each interview was transcribed by the researcher, notes regarding key responses, attitudes, emotions and tonality were recorded and added to the transcriptions, and the researcher coded the data for themes, ideas and categories for further data analysis (Gibbs, 2005). The researcher attempted to identify similarities and differences between the student and teacher interview groups. The researcher also identified themes, topics, and structured questions relevant to the study and literature review. Students were advised of the audio recording prior to the interviews.

*Measures Taken for Protection of Human Subjects*

The research study was approved by the superintendent of schools, which ensured that steps were taken to protect participant's rights. Only participants under the age of 18 whose parents had given consent or gave their own consent if they were over the age of 18 were permitted to participate in the study (see Appendix F and G). The researcher asked the participants questions that were relevant to the outcome of the study. All of the information were kept in a secure location and will be destroyed after the completion of the survey. The school, student and teacher names will remain anonymous and identities will be substituted to ensure the subjects' confidentiality. Finally, while the researcher had access to specific academic achievement data, there was no identifiable student information incorporated into the study.

*Preparing the Data for Analysis*

The researcher opted to administer the survey to the participants using a paper and pencil method due to the lack of computers available to the researcher at the time of the surveys. The researcher created both the survey and interview instrument online and entered by hand all data from the paper-pencil surveys. The researcher also transcribed all of the interviews. Student responses were retained for future reference. The data were analyzed and charts and graphs were developed by the website. Quantitative data were summarized and manually entered into SurveyMonkey.com.

The researcher obtained the number of credits and days absent from the participants' official transcripts at the end of the 2009–2010 school year. The researcher received the dropout data for the 2008–2009 and 2009–2010 school year from central



office, along with the number of early graduate applications for both the 2008–2009 and 2009–2010 school years. All of the data was analyzed separately from year 1 to year 2, in order to gather a more accurate analysis for all four categories. All of the quantitative data were manually placed into SurveyMonkey.com for analysis.

### *Summary*

The intent of the mixed-method study was to assess the impact of the implementation of A+LS online instruction at an alternative high school. The researcher measured academic success by credits earned and attendance by days present. The alternative school's dropout rate and a comparison of early graduation applications between the implementation year and the year prior were analyzed.

In chapter 3, the researcher discussed the overall design of the study. The instrumentation and alignment of the instrument was discussed along with the level of validity and reliability of the instruments to demonstrate that the instruments are suitable assessment tools. Specific validity concerns were found with the study, which included the selection of subjects, history, loss of subjects, mortality, maturation, and regression threat. Additionally, the limitations associated with the study were discussed along with the measures implemented to resolve them. Protection of participant confidentiality was also discussed. The original population of the study was 45. The researcher randomly selected 15 samples to conduct the quantitative analysis. Finally, the quantitative and qualitative data analysis procedures were discussed and will be further analyzed in chapter 4 in a detailed discussion of the data.

## Chapter Four: Results

The purpose of this mixed methods study was to examine the implementation of the A+LS in an alternative high school and the effects it had on student attendance, academic achievement, and the dropout rate. The study consisted of five stages.

First, the researcher contacted a group of educational professionals to make up a content validity panel. This panel gave a number of valuable suggestions during the design and implementation of the survey and interviews. Second, students were invited to participate in a paper and pencil survey. The survey utilized a 5-point Likert scale. Third, the researcher interviewed 12 students and 4 teachers to seek support for responses summarized in the quantitative data. The interview was based on eight questions. The interviews lasted between 15 and 20 minutes. Fourth, the researcher observed the participants during a number of class periods at the alternative school. Finally, the researcher utilized data collected from 45 participant transcripts to determine academic achievement and student attendance data. The researcher also received quantitative data from the district's central office relating to dropout statistics and early graduation data.

The research question for the study was: To what extent does implementing the A+LS online instruction in an alternative high school increase academic achievement, increase attendance and decrease the dropout rate?

The research questions that guided the qualitative aspect of the study were as follows:

**RQ 1.** What impact do the students and teachers think the implementation of A+LS has on the alternative school environment?

**RQ 2.** What impact did the implementation of the A+LS have on student achievement, student attendance, and the alternative school dropout rate?

**RQ 3.** Do students and teachers perceive the A+LS curriculum to be challenging and rigorous enough for the students? Did the online curriculum prepare the students for the future?

### *Qualitative Data*

#### *Survey Results*

The surveys were administered to 27 of 45 possible participants with a return rate of 60%. The survey consisted of nine questions that focused on the implementation process, academic achievement, rigor of the program, motivation to learn, attendance patterns, work ethic, level of educational knowledge, and whether they would recommend the A+LS to a potential dropout. The design of the survey was paper and pencil. The researcher then entered all of the survey responses into the online tool SurveyMonkey.com for analysis purposes. Each question required the participants to answer either (1) *Completely Disagree*, (2) *Somewhat Disagree*, (3) *Neutral*, (4) *Somewhat Agree*, or (5) *Completely Agree* (see Table 3).

Table 3

*The A+LS Survey Results*

	Completely Agree	Some what Agree	Neutral	Somewhat Disagree	Completely Disagree
1. The A+nyWhere Learning System (A+LS) online instruction prepared me for college and/or the workplace.	2 7%	10 37%	11 41%	4 15%	0 0%
2. The A+nyWhere Learning System (A+LS) online instruction was challenging.	1 4%	8 30%	12 44%	3 11%	3 11%
3. The implementation of the A+nyWhere Learning System online instruction increased my effort to earn more credits.	19 70%	5 19%	1 4%	1 4%	1 4%
4. Learning with the A+nyWhere Learning System (A+LS) online instruction was enjoyable.	5 19%	7 26%	10 37%	2 7%	3 11%

<p>5. The implementation of the A+nyWhere Learning System (A+LS) online instruction motivated me to attend school on a more consistent basis than when I was taught by a teacher who utilized direct instruction teaching method?</p>	<p>6 22%</p>	<p>7 26%</p>	<p>8 30%</p>	<p>2 7%</p>	<p>4 15%</p>
<p>6. The implementation of the A+nyWhere Learning System (A+LS) online instruction encouraged me to stay in school and work towards my high school diploma.</p>	<p>13 84.1%</p>	<p>7 25.9 %</p>	<p>4 14.8%</p>	<p>1 3.7%</p>	<p>2 7.4%</p>
<p>7. My level of knowledge increased due to the delivery method of the A+nyWhere Learning System (A+LS) online instruction</p>	<p>5 19%</p>	<p>10 37%</p>	<p>8 30%</p>	<p>2 7%</p>	<p>2 7%</p>
<p>8. My learning increased more with the A+nyWhere Learning System (A+LS) online instruction than when I was taught utilizing the direct instruction method.</p>	<p>7 26%</p>	<p>6 22%</p>	<p>8 30%</p>	<p>3 11%</p>	<p>3 11%</p>

9. I would recommend the A+nyWhere Learning System (A+LS) online instruction to anyone who is thinking of dropping out of school.	22	2	2	0	1
	81%	7%	7%	0%	4%

*Interviews*

All participants were interviewed in a semi-structured setting and were scheduled during the school day and followed the questions in Appendix D. The interviews were conducted face to face, were audio-recorded and transcribed for the purpose of content analysis. The purpose of the interviews was to collect information regarding the participants’ viewpoint of the A+LS compared to direct instruction in relation to academic achievement, student attendance, and dropout rates. The researcher also collected feedback on student motivation, student teacher interaction, and difficulty level of the program.

*Student Interviews*

The researcher originally planned to conduct interviews with 15 of the 45 returning students, along with the four staff members. Twelve students volunteered by returning their signed student permission forms. One of the students, who was 17 years old, returned a parent permission form prior to participating in the interview.

Table 4

*Interviewee Demographics*

Student	Gender	Age	Student Status
#1 Rachel	F	18	Transferred to Missouri Options
#2 Steven	M	18	Transferred to Missouri Options
#3 Malkim	M	17	Graduated Early
#4 Robin	F	18	Graduated Early
#5 Lisa	F	20	Senior/Graduated
#6 Melinda	F	19	Senior/Graduated
#7 Josie	F	18	Senior/Graduated
#8 Bob	M	18	Transferred to Missouri Options
#9 Karon	M	18	Senior/Graduated
#10 Raphael	M	18	Senior/Graduated
#11 Alphonso	M	19	Senior/Graduate
#12 Jose	M	19	Senior/Graduated

*Note.* Pseudonyms are used in place of participant's actual names

The researcher was able to interview a mix of male and female students; there were 7 males (58%) and 5 females (42%). At the time of the interviews three (25%) of the participants had transferred from the alternative high school to the Missouri options program, which is housed in the same school and utilizes the A+LS to prepare for the general education development (GED) credential. Two participants (17%) earned

enough credits to apply for early graduation. Seven (58%) of the participants were seniors and graduated in June 2010. One (8%) 17-year-old received parental permission to participate in the study, and permission was received from seven (58%) 18-year-olds, three (25%) 19-year-olds, and one (8%) 20-year-old. The researcher attempted to interview a number of 17-year-old participants; however, despite numerous reminders, the group failed to return parent permission forms.

Participants were all members of the alternative school, and attended either the Missouri options program or the alternative school. The Missouri Options Program and the alternative school both utilize the A+nyWhere Online Learning System to prepare the students. All of the participants were there because they struggled at the traditional school and were behind in credits. Participants had one additional commonality; they had the desire to graduate and finish high school. Some of the students felt they were not receiving the help they needed to succeed at the traditional school, and they just did not fit the traditional school system. While other students mentioned that they were in trouble at the regular high school. The participants who volunteered for the interviews were willing and expressed their opinions about the A+LS.

The researcher conducted the interviews at the end of the third semester of the school year. This allowed the participants to reflect on their experience of the program. The researcher realized that while waiting so long to conduct the qualitative aspect of the survey, a number of the students in the quantitative portion of the survey had already completed their course work and graduated early. Therefore, a low number of



participants were able to complete the survey and interviews, compared to the 45 participants in the quantitative piece of the study.

### *Student Themes*

The qualitative data gathered during the interview, survey, and observation process were collected into significant pieces of analysis. Common, consistent themes provided a better understanding of how the participants in the study viewed the implementation of the A+LS as it related to student achievement, attendance, and dropout rate. The majority of the themes were consistent with the literature review in chapter 2. The most common themes that were found in student interviews were: Student–teacher relationships, academic achievement (credits), self-paced program, motivation, and college/workplace prep.

### *Student–Teacher Relationship*

The majority of the participants stated that their relationships with their teachers improved after the implementation of the A+LS. Some of the common themes that emerged included that the participants developed an attitude towards their teachers that was either positive or negative and the one-on-one help they received increased with the implementation of the A+LS. Some of the participants stated that “the alternative school is like a family and the teachers have made it feel that way, they don’t make it feel like a school.” Rachel stated that with the implementation of the A+LS, her relationship with her teachers had improved. During the 2008–2009 academic year, when the teachers conducted class, she would disagree with them and the material they were teaching. Rachel felt that she was not successful in 2008–2009 due to the lack of support she

received from her teachers. In the 2009–2010 year, “the teachers helped me more when I had a question. They know what they need to help each student with.” Steven’s relationship with his teachers had also improved due to the increased one-on-one time he received after the implementation of the A+LS. Steven liked the self-paced aspect of the program and acknowledged this was the reason teachers could give more one-on-one instruction to the students.

Lisa, who had been a dropout for approximately two years, returned to the alternative school last year. Lisa enjoyed attending the alternative high school because the teachers are always friendly and made the school have a family-like atmosphere, rather than a school. Lisa was adamant that she got along with her teachers at the alternative high school during both academic years. She also liked the A+LS and how teachers were now able to give more one-on-one time to the students. Raphael stated that he really liked the alternative high school because “all of the teachers are pretty cool, they help you out a lot when you need help. They will work with you when you have questions.” Raphael reiterated that he did not like the A+LS first, since he did not like computers, but the teachers helped him and made him feel comfortable. He had received more help this year than last year due to the individualization of the program.

Some participants stated their relationship had not improved with the A+LS. Malkim found that there was less interaction with the teachers than last year. “The teachers are not doing hands on activities this year, the only time they interact with you is when your computer needs to be reset or when you have a question.” With the A+LS the students were, for the most part, on their own. “This year the teachers are not teaching

you, students are teaching themselves.” Some participants stated that their relationship with the teachers had changed, and they still talked to their teachers. However, one student mentioned that, “We are not learning from the teachers like we are supposed to be; they should be teaching us.” These participants concluded that the teachers ensured each student’s lessons were completed, helped students with their notes and answered students’ questions. A number of the participants mentioned that the only time the students and teachers interacted was when the students had questions about their individual lesson. Teachers acted more like proctors since the implementation of A+LS.

Josie was vocal of her dislike of the A+LS, stating that she was against the entire online learning concept. She insisted she learns better by direct instruction. Josie’s experience included a lack of support and assistance from her teacher. She declared that “we are passing our classes on the computer, we could do this at home, and the teacher’s role now is supervising.” Bob was also vocal of his displeasure with the A+LS and his decision to transfer to the Missouri options program. Bob stated that once the alternative program switched to the A+LS he did not feel like he had a teacher. Bob said,

Yes, it makes me feel like I don’t have a teacher, makes me feel like I am babysat and like they are just there to make sure we don’t run around and goof off. For real, it is really weird when we are in a science class and that person who is supposed to be your teacher during that hour does not have a science degree, or know anything about science. Basically, at the end of the day you are asking a question that you don't know and they don't know; they are basically putting their hands up in the air like I can't help you.

Similarly, Alphonso was displeased with the role of his teachers. He felt that his relationship with his teachers had changed, “You don’t really talk to the teacher as much with the A+, you are pretty much teaching yourself. Teachers are there pretty much to babysit and make sure the students are behaving and not running around. The role of the teacher is babysitting.” Alphonso felt that the teachers should have been teaching and working with students. He stated that being on the computers for two to six hours a day is really boring. Jose mentioned that,

Some of the classes got a little more hostile; I got more frustrated working with the computers than hands on. Sometimes the teachers will help you out, other times teachers are working with other students, sometimes the teachers do not know what they are doing.

#### *Student Achievement*

The participants overwhelmingly stated their motivation increased due to the ability to earn more credits. They were also motivated due to the self-paced aspect of the program, which resulted in an increased effort to stay focused towards their goal of graduation. The majority of participants mentioned that they enjoyed the self-paced program; they could work at their own pace and did not have to rely on their teacher to give them the notes or previously taught information. The participants worked alone and taught themselves. One participant mentioned that “you can work ahead without anyone bugging you, at your own pace. If you worked hard enough you could probably finish a course in a day.” Another participant stated that the self-pacing of the program motivated her to come to school early, work through lunch, and work harder so she could graduate

early. Another mentioned it was easier for him to go at his own pace rather than to do what everyone else was doing.

The majority of participants mentioned they were excited and motivated to work hard and earn extra credits, so they could graduate early or on time. Robin stated, “at the beginning a lot of students dropped, they did not give the computers a chance. Once participants got used to the computers, more people graduated earlier than last year.” One participant stated due to the A+LS he attended school more this year than last year. He was excited when he found out; he could earn more credits and graduate on time since this was his senior year. Another participant mentioned that,

Once I entered the Missouri options program and began to work on my GED, I took the program seriously. I could see the light at the end of the tunnel and my goal of graduation was in sight. As a system, it is a good system; you just have to be motivated towards it.

Rachel insisted that the one aspect of the program she liked was that “I can just go to school and sit there, nobody talks to me. I can try my hardest and go through the lessons; I don’t have to wait for anyone to catch up to me. I just do it; it is easy.”

At the beginning of the 2009–2010 academic year, Malkim was one and a half credits behind. With the A+LS program, he was able to work hard and earn the credits and other outstanding credits so he could graduate a semester early. Malkim found the A+LS system to be much easier than direct instruction. He stated that “if you do not pass a test, you can retake the test until you pass the test, therefore earning credits faster.” Melinda affirmed that self-paced learning motivated her to work harder and earn more

credits. “It is easier; you want to do more, when you are on your own.” Melinda liked having the notes in front of her and being able to refer to them at any time. Melinda got frustrated when she had to rely on someone else to give her the notes, or have to repeat the notes due to her failing to understand them the first time. With A+ LS, Melinda gets more done as a result of her ability to work alone and go at her own pace. Due to her dislike for the program, Josie was not motivated or engaged during a typical school day. She thought the classes were boring and found it extremely hard to concentrate. Therefore, she was not motivated to work towards earning extra credits. Melinda stated that “I paid more attention during direct instruction.” Bob also shared his dislike for the program and how the A+LS contributed to his dropping out of the alternative high school and enrolling in the Missouri options program.

I did not like it at all. Really it’s not learning at all, it’s like once you figure out how to cheat the system that is all you do, you just go through and study for five minutes waiting for those five minutes to be up so you can go to the practice. During the practice, you can click on one of three answers three times until you get the right answer, and you write down the right answer. You then go on to the test. This is just cheating your way out of an education, really.

Karon liked the format of the A+LS. He enjoyed being able to work at his own pace, which motivated him to work harder. He worked through lunch, and came to school early to accomplish more of his studies. “This program has really helped me out, I am graduating early.” He was excited about graduating early and stepping out into the real world. His plans included going to college and getting a good job. Alphonso also

worked harder to earn more credits to graduate earlier than expected. He was excited about the possibility of graduating early and stated that “this would not have happened during direct instruction.” Jose stated “you can work ahead without anyone bugging you, at your own pace. If you worked hard enough you could probably finish a course in a day.” The A+LS program worked with students to provide them with the notes, diagrams, and descriptions needed to study for the quizzes and tests. He stated that “the computer helps you out pretty much, just like the teacher would.”

#### *Self-Paced Program*

The participants stated that the one advantage of the A+LS was the ability to work at their own pace. This afforded them the ability to work on their own learning plan and allowed them to earn more credits in a shorter amount of time. Rachel thought the A+LS was easier than direct instruction; her understanding of the material was greater with the A+LS than direct instruction. Rachel believed this was due to working at her own pace, which included reading, taking notes, taking the quizzes and tests.

Steven described one of the positive attributes of the A+LS as being able to work at his own pace. He stated that he struggled during direct instruction, due to him being a slow writer. Therefore, he could not keep up with the notes. With the A+LS, he was able to take the notes at his own pace. This has increased his motivation to learn: “I feel I am learning more than a regular class, I like the program.” Robin enjoyed the benefits of working at her own pace, and was able to earn extra credits and graduate a semester early. However, she did mention that the program was more difficult due to the amount of concentration and time each lesson took to complete. Robin stated that “it takes a lot

more time; you have to go through the practice, then go through the notes, then the pretest, then the test. It takes so much more time to complete.” Lisa talked about the main difference she observed between the 2008–2009 and 2009–2010 school years, which was the ability to work at her own pace. Being able to do so also increased attendance rate over the 2008–2009 academic year when she did not enjoy listening to the teachers repeat themselves, because other students did not understand the concepts. Lisa thought last year was a waste of her time and felt that she is learning more with the A+LS, since she is moving at her own pace. The A+LS program made it easier for her, since she could come to school and work on her individual learning plan. Thus, when Lisa needed help, she just asked the teacher for assistance.

Melinda stated that self-paced learning has motivated her to work harder and earn more credits. Melinda said, “It is easier; you want to do more when you are on your own.” She liked having the notes in front of her and being able to refer to them at any time. Melinda did not like it when she had to rely on someone else to give her the notes or repeat them if she was unable to comprehend the notes. With the A+LS Melinda completed more due to her ability to work alone. Karon stated that during direct instruction, when a teacher was teaching, the instruction was broken up and it was hard for him to understand. He enjoyed being able to go back and re-read his notes and the material. He also enjoyed studying and taking the test at his own pace.

Raphael talked about how the A+LS instilled a positive work habit in him. He mentioned that “this program taught me to do things on my own, to work on my own.” Raphael talked about having to work at your own pace and knowing he could earn extra



credits so he could graduate early, which motivated him to work harder. Jose agreed with the rest of the students that the classes are not necessarily easier; the part he liked was working at his own pace.

### *Motivation*

There were a number of topics participants mentioned regarding motivation. Students were motivated to work harder due to the A+LS; they felt they attended school on a regular basis as a result of the program, while others felt the implementation of the A+LS demotivated them to work hard. They found this system boring and were unmotivated to attend school as much as the previous year.

Steven stated A+ LS had increased his motivation to learn: “I feel I am learning more than a regular class, I like the program.” Robin was excited about how the A+LS increased her motivation and engagement in school. She stated that “two or three months ago, I was three credits behind, now I am graduating early, so yes, this has motivated me to make consistent grade improvements.” Because of her level of motivation and desire to finish, she mentioned that her attendance had increased during the 2009–2010 academic year. “It is on me to get my assignments completed; I know I have to be here to pass.” Lisa talked about the main difference she observed between the 2008–2009 school year and the 2009–2010 school year, which was that she enjoyed being able to work at her own pace. Being able to do so increased her motivation level to attend school more this year than last year. Melinda stated the self-paced learning motivated her to work harder and earn more credits. She stated that “it is different this year, we are on computers, and last year we were not on computers. I have a goal this year. It has

motivated me to get my credits completed.” Karon mentioned that he was excited about the program and was more motivated in 2009–2010 than he had been the previous year to work hard, earn his credits and graduate. Karon did not believe this has made him attend school more often this year, but when he is at school he works harder. Karon comes to school earlier, works through lunch and has more motivation to graduate school. Raphael stated his motivation for school has improved since the A+LS was instituted. He said it is like having “free night school.” His academic achievement level has improved, and he has earned an increased number of credits and may graduate on time.

In contrast, Josie mentioned that, due to her dislike for the program, she is not motivated or engaged during a typical school day. She thought the classes were boring and found it hard to concentrate. She stated the implementation of the A+LS did not motivate her to work harder to earn extra credits. Josie reiterated that she paid more attention during direct instruction. She also thought the online curriculum was more difficult. This lack of motivation has caused her to miss more school during the 2009–2010 year. The reasons given included; “last year was fun while the A+ program is really boring.” Bob talked about his dislike for the program and how he was not motivated to make consistent grade improvements; he stated the program frustrated him.

Bob’s dislike for the program was so strong he transferred to the Missouri options program, so he could possibly graduate earlier by taking the GED test. However, once he entered the Missouri Options Program to work on his GED certification, he took the A+LS program more seriously and learned the material. Bob’s effort and motivation improved since he could see the light at the end of the tunnel. He mentioned that, “as a

system, it is a good system; you just have to be motivated towards it.” Bob stated, “taking helpful and caring teachers away and putting students in front of a computer for eight hours is not motivating.” Alphonso stated that he has worked harder to get through more classes on the A+LS so he can earn more credits and get out of school earlier. This, however, has not helped his attendance. “I have missed more days this year than last due to the boredom of sitting in one class in front of a computer for two hours.”

### *College Prep*

Students talked about their feelings about the A+LS and how it prepared them for the future. Some of the participants felt the system was preparing them for the future, while others did not feel this would help them in college or the workplace. Rachel commented that the A+LS was not preparing the students for college. Her comments were based on the presumption that colleges do not have the A+LS installed on its computers. She also mentioned that most colleges have instructors to teach the students.

Malkim believed the online instruction would prepare a person for college if they would be working with computers on a daily basis. Lisa stated that the main reason she liked the program was because it helped her to get her high school diploma more quickly and therefore helped her to pursue career goals sooner. Lisa knew from past experience that a high school diploma would help her in the future. Lisa was planning to enter the Marine Corps, and she did discover that a high school diploma was a requirement to enter the service.

Melinda, however, did not believe the A+LS prepared her for college. She did not believe students were learning anything that would be utilized in college. Despite her

dislike for the program, Josie believed it may be helpful to some people in college if they were going to take online college classes. Karon agreed the A+LS prepared him for college and the real world. He mentioned that he was excited to finish high school and pursue his goals of getting a job and going to college. Alphonso stated, “the A+nyWhere Learning System may help some people transition to college or the work force if they are going to be working with computers, but most people are not on the computer for that long. There is no need to be on a computer for that long.” Jose talked about how he felt the program was preparing him for the real world and trade school: “I am trying to get into a technical college, and so working with computers now, is what I will be doing over there.”

#### *Staff Interviews*

The researcher conducted the staff interviews in a semi-structured manner and adhered to the outline of the interview questions in Appendix E. Interviews were conducted face-to-face and scheduled after school when there were no students in the building. The interviews were audio-recorded and transcribed for the purpose of content analysis. The four remaining staff members from the 2008–2009 school year were interviewed. There were 2 male and 2 female staff members; 1 administrator, 1 physical education teacher, 1 special education teacher, and 1 business teacher. The interviews took place at the end of the third semester, after the students and staff had experienced three semesters of the A+LS. The researcher utilized pseudonyms in place of the staff member’s real names to keep the identities of the staff confidential.

*Staff Interview #1: Mr. Green*

Staff member Green, started working with alternative students' right out of college and worked at a traditional school for a number of years. He had an opportunity to return to the alternative setting and had been teaching at the alternative school for the past 3 years. He stated that he enjoyed working with the students at the alternative school. Through his experience in the 2009–2010 academic year, he saw the interaction between the teachers and students diminish. Green commented that the students were reluctant to ask for help at the beginning, and he believed that once the program develops, the students would learn to utilize the teachers and ask for help. He mentioned that his job is two-fold; he has the "hands on" portion of physical education teaching and the proctoring aspect of the A+LS. He saw his job as a proctor as ensuring students are doing what is required and not just playing on the Internet. Green perceived the program to be easier because a computer monitor is less threatening than a teacher. He stated that "students have to build a rapport with a teacher; these kids don't have the social skills to build up those skills. The computer drops all those inhibitions." The students are used to working with computers and technology comes easy to them.

However, Green saw an increase in student motivation once the program was spelled out as enabling credit recovery. The students were able to work at their own pace and enjoyed working with the computers. According to Green, "I think they are not afraid of it, rather than a teacher." Green described the students as very bright and goal setters. He talked about how most of the students treat the A+LS program like a competition, and want to see how quickly they can get through a class. This is also an

outstanding program for students who are homebound. Green also saw a decrease in the number of student discipline problems since the inception of the A+LS.

Green felt that the program prepared students for the workplace, and he believed regular high school prepares them with more in-depth, hands-on, project-based activities. According to Green, “the basic knowledge our students need to know, they are learning. Maybe one percent will go to college, so for our students entering the workforce, it is preparing them.” He also felt the training and professional development teachers and staff received from the district and the company that developed the A+LS did an excellent job. “There are more things on this program that can be done; we have just scratched the surface.”

*Staff Interview #2: Mrs. Allison*

Mrs. Allison has been working as the administrator at the alternative high school for just over one year. She came from the traditional school, the same building where the alternative school is located. Allison decided to move to the alternative high school because she thought she could make a difference in the lives of at-risk students. Allison has noticed the atmosphere in the building is more positive since the implementation of the A+LS. In the past, with direct instruction in all classes, there were more behavioral problems. Allison credited the students as being more engaged and focused with their studies because the A+LS is a self-paced program. Allison mentioned that the program has increased academic achievement, decreased the number of Ds and Fs, but has yet to increase student attendance. According to Allison, “the teachers are happier, the students

work harder, every day that a student completes a lesson, they earn an apple on the computer. The students are accountable every day.”

Through her experience in the 2009–2010 academic year, Allison has seen the motivation levels of the students increase. “Students are in charge of their own learning. They know every day where they are, where they need to be and where they need to go.” They also know once they complete with a course they do not have to wait around for others to finish as they would at a traditional high school. Students can immediately start another class, so they have the opportunity to move ahead and earn credits at an increased rate. Allison stated that “a number of the students are taking classes they failed at the traditional school, therefore, once they get into the course and they pass the pretest with a 90% or better, they can move on to the next lesson. If not, unfortunately, they have to continue to move on to the study.” Allison stated that she felt the A+LS is more difficult than direct instruction. Students are required to read, focus, and take notes. This is difficult for a number of the students at the alternative high school.

The researcher asked Allison if she believed the A+LS motivated students to attend school more than last year. Allison stated,

In the beginning of every semester, the students attend on a regular basis, towards the end of the semester; the attendance tends to go down because the students have completed their courses. Although we give them another course, the students know in the back of their mind they don’t have to complete those courses because they have already completed what they have to for that particular semester. Therefore, at the beginning of the semester, attendance increases and

everyone is motivated to come to school. Everyone is excited about their new classes; they get in there and get moving. The last five days of the semester, some kids who are finished, feel they don't need to come to school to work on that next class, because they know it is not something they have to get finished.

Allison believed the program would help the students to transition into college or the workforce. Since she has been at both the traditional high school and the alternative school, Allison did not see a major difference between the program and the traditional school program in the preparation of the students for college and the workforce. The professional development provided by the corporation that produces the A+LS to the staff, according to Allison, was effective, except that it did not happen until the very first day of the school year.

Allison stated that "this made it extremely difficult for educators to know exactly what they were getting into with regards to the computers, and the curriculum." Therefore, the first and second semesters were a trial and error period since the staff was unaware how long it would take the students to finish each lesson, or that students could go on to the Internet and type a question into Wikipedia and receive the answer. Allison concluded that through trial and error the staff learned a great deal. For example, a number of students had their Internet access blocked, the staff modified some of the lessons, and rigor was added to some of the lessons and to some of the assessments, plus the requirement of note taking was added to the final grade. In January, a requirement of two essays and a formative exam at midterm was added. Allison concluded that



“she does not believe they received enough training prior to the implementation of the program. Although, if we had received the training, I don’t know if you can really judge the effectiveness of the software until you truly lived it.”

Allison mentioned that throughout the implementation of A+LS the staff learned a great deal of information. There are going to be some changes based on student suggestions during the 2010–2011 school year. Allison mentioned there will be more direct instruction courses in the afternoons. Students have asked for classes in the afternoon that are more hands-on, are project based and interactive with the teacher. The students also want the majority of their computer-based courses to be held in the morning, when they are able to concentrate and focus. The students have complained that they are losing focus in the afternoon.

The A+LS has been found to be advantageous to high school students in the district, and that the three traditional schools have begun utilizing part of the A+LS to increase students’ academic achievement. According to Allison, while they are not utilizing the entire program, they are utilizing up to 25 courses. This is also being utilized in the Type 2 alternative school, Missouri options and as the high school and middle school summer school curriculum.

*Staff Interview #3: Mr. Kinkaid*

Mr. Kinkaid started his teaching career at the alternative high school. He graduated from the district’s alternative high school and particularly wanted to come back and work with at-risk students because he felt the alternative school made a positive difference in his life. Kinkaid stated that, since he was an at-risk student at one time, he

felt he could relate to the students. The 2009–2010 academic year was Kinkaid’s second year working with at-risk students. He worked at the alternative high school on a part-time basis last year, while teaching at the district’s Type 2 alternative high school.

Kinkaid revealed that he liked the A+LS. Since its implementation, Kinkaid is able to work with students more frequently on a one-on-one basis than last year due to the individualization of the program. Kinkaid felt this had increased his interaction with the students and his ability to sit by the students and help them on their individual lesson or questions. He believed the A+LS motivated students to work harder to earn more credits. Kinkaid felt the students understood this was a credit recovery program that allowed them to earn more credits to graduate early, although he felt student attendance did not increase over last year. Kinkaid stated that

the students are either motivated to get here and finish or they are not. I don’t think it has made that much of a difference, some individuals saw that if they hurry up they can finish the classes in a relatively short period of time.

However, he felt that there was a great deal of reading comprehension involved with the program, and it was difficult for some of the students. Kinkaid believed this prepared the students for college due to the note taking and study skills learned in the A+LS. Kinkaid considered these to be two necessary skills the students will utilize in college.

*Staff Interview #4: Ms. Smith*

Ms. Smith has been teaching at the alternative high school for the past 3 years. This was her first teaching job. Prior to teaching, she was a technology paraprofessional

in the district. She enjoys working at the alternative school: “I feel we are really changing the lives of the students, one kid at a time. The small classroom setting lets you see the evidence of your teaching.” Smith stated that the A+LS gave her more time to work with students on an individual basis. Smith stated,

During direct instruction, if a student missed a lesson, then a number of the students could be on different pages; in this case each student has their lesson they are engaged in. I can help one particular student at a time.

Smith has also seen a difference in behavior during class. If a student had a behavior problem; the teacher could talk to that student while the other students remained focused on their lesson.

Concerning motivation, Smith stated that there were a number of students who were internally motivated and knew they were in charge of their own learning. These students understood how quickly they could earn credits and move on to other courses and graduate early. Smith mentioned that some of the students struggled with the A+LS. “They are not sold on the idea, and are struggling with motivation, it has not clicked yet.”

Smith expressed some concern with the rigor of the program. She believed the rigor of the lessons to be adequate; however, she felt the assessments should be more rigorous. “I wrestle with the idea of how do we know if the students know the material by answering ten questions and then moving on to the next lesson.” Smith had seen some students fly through some of the lessons (as many as nine lessons in one day) after not completing any in a week. She questioned how much of that material the students were

really retaining. “If we are saying they have mastered the program by answering ten questions, then it is a good program.”

Smith was concerned with the knowledge, or lack of knowledge, students learn and how this would impact students in years to come. Smith did not believe the A+LS program prepared students for college, but she did believe students learned more in some of their classes than last year. Smith felt that students needed more real-world applications and were not receiving this with the A+LS. Students need to be able to utilize the information they are learning. She stated that “the game the students have learned to play is how quickly I can get through one lesson?” There was some concern with the training the staff received. Smith also mentioned that the training was good, but they did not receive this until the day before the students arrived, which meant that teachers did not have time to learn the program prior to its implementation.

#### *Classroom Observation*

The researcher visited the alternative school on two different occasions and observed different classrooms, including the Missouri options classroom participating with the A+LS software program. During the observations, the researcher learned the operations of the system, the grading system, and the activities of the students. The researcher observed a 75-minute biology, American government, and sociology class, respectively at the beginning of the new semester. The students appeared to be excited to begin their new classes, due to their initial engagement and the questions they asked the teacher about their classes. The class also had 95 percent of the students present on the first day of the semester. Some of the students during this class were working on

biology, some were working on American government, and others were working on sociology. The teacher proctoring this session was a communication arts teacher.

The lesson began with the teacher reviewing and teaching a note taking lesson; students are required to take notes in each of their lessons. These notes are worth 10% of the final grade. Since it was the beginning of the semester, there was a new student in the class. The teacher worked with this student to get him accustomed to the A+LS. While the teacher was talking and giving individualized attention to this student, the other students were working on their lessons, focused and engaged in taking notes. One of the students was off-task looking for online music for his wireless device. The teacher talked to this student and redirected him back to the task. Other students were working on their notes; some of the students wrote their notes in long hand, while others typed their notes, and one of the students cut and pasted information from the Internet into Microsoft Word. Other students were researching information on the Internet, reading information on the computer, and answering questions on pretests and mastery tests. The teacher continued to walk around and answer questions students had about the material. The majority of students did not have questions on their lessons. The teacher spent the majority of her time working with the new student, getting her familiar with the A+LS.

During the lesson, the researcher observed a number of students taking pretest, practice, and mastery tests. During these tests, and after every question, the students received immediate feedback from the A+LS program, regardless if the question was answered correctly or incorrectly. Some of the responses were “good job, excellent, outstanding job, keep trying, and sorry.” The researcher noticed that students toward the

end of the 75-minute class having a difficult time focusing. The majority of the students did an excellent job focusing and working for the majority of the class period, but for the last 5 to 10 minutes, the majority of students were off-task, drawing, talking, and searching for music. The teacher had a difficult time keeping them focused and on task. The researcher noticed a poster in the room and asked the teacher about it. At the beginning of the year students learned the meaning of St. Puma, they are reminded of this throughout the school year.

S = Take time to study

T = Take good notes

P = Score 70% on practice test

U = Use notes on mastery test

M = Score 70% on Mastery test

A = Earn an Apple reward

The teacher explained the process of the A+LS to the researcher. Daily the students enter class and log onto the computer. The first thing the students do is attempt a pretest. If the student earns a 90% on the pre-test they automatically pass that lesson and move to the next. The researcher observed students getting excited when they passed their pretests. Students who do not pass the pretests are required to start the lessons study session. The students have to work through the lesson for at least 5 minutes prior to taking the lesson's practice test. They are required to take notes in the study. They have three attempts to receive a 70% on the practice test, and once they receive a 70%, they are able to move to the next lesson. The students continue through the course until they

finish all of the lessons and are ready to take the mastery test. The students can utilize their notes on the mastery test and must receive a 70% to pass that test. The administration and school have recently implemented an essay portion to the courses to pass the test. The students' final grade at the end of the semester consists of 40% for the first half of the semester, 40% for the second half, and 20% for the final exam. The teachers decide where to add the 10% for the notes.

Students are in charge of their learning; they received immediate feedback every time they pass a lesson by having an apple placed on the computer monitor. They are able to see the apples each time they log on. Teachers can also see how many apples the students have earned at the end of each school day. Students understand that they are required to earn two to three apples per day in each of their courses. They also understand that if they are on track and earning their apples every day, they can listen to their iPods while they are working on their lessons.

The school incorporated an intervention room to help the struggling students. The students could be struggling due to a lack of motivation or refusing to complete their lessons. The intervention room is open to struggling students during the last five days of the semester. This room was developed to give more one-on-one instruction and focus time for those struggling or those who are refusing to complete their lessons. Once a student is placed in the intervention room, all of their privileges are taken away, including the ability to listen to music. The students' main task is to work on their lesson and earn their credits by the end of the semester.

*Quantitative Data*

Data gathered in this survey included academic achievement data recorded by credits earned for the school years 2008–2009 and 2009–2010. Additional data gathered on the 45 participants were days absent from school for the 2008–2009 and 2009–2010 school years. The researcher also gathered dropout data for the 2008–2009 and 2009–2010 school years. The last piece of data the researcher gathered from the district was early graduation requests for both the 2008–2009 and 2009–2010 school years.

*Research Hypotheses*

The following four null hypotheses were addressed in the study:

**H<sub>1</sub>**. Implementation of the A+LS through the use of online instruction with at-risk students in an alternative high school will increase academic achievement, as measured by a comparison of the number of course credits earned before implementation to the number of course credits earned after implementation.

**H<sub>01</sub>**. Implementation of the A+LS online instruction with at-risk students in an alternative high school will not result in an increase in academic achievement as measured by a comparison of the number of course credits earned before implementation to the number of course credits earned after implementation.

**H<sub>2</sub>**. Implementation of the A+LS online instruction with at-risk students in an alternative high school will result in an increase in student attendance rate, as measured by a comparison of the attendance rate before implementation to the attendance rate after implementation.



**H<sub>02</sub>.** Implementation of the A+LS online instruction with at-risk students in an alternative high school will not result in an increase in student attendance rate, as measured by a comparison of the student attendance rate before to the student attendance rate after implementation.

**H<sub>3</sub>.** Implementation of the A+LS online instruction with at-risk students in an alternative high school will decrease the dropout rate at the alternative school as measured by a comparison of the dropout rate before to the dropout rate after implementation.

**H<sub>03</sub>.** Implementation of the A+LS online instruction with at-risk students in an alternative high school will not result in a decrease in the dropout rate at the alternative school as measured by a comparison of the dropout rate before implementation to the dropout rate after implementation.

**H<sub>4</sub>.** Implementation of the A+LS with at-risk students in an alternative high school will cause an increase in the amount of early graduation applications, as measured by a comparison of the early graduation applications prior to the implementation of the A+LS.

**H<sub>04</sub>.** Implementation of the A+LS with at-risk students in an alternative high school will not cause an increase in the amount of early graduation applications, as measured by a comparison of the early graduation applications prior to the implementation of the A+LS.

*Quantitative Results*

Data gathered in this study included academic credits from the students' high school transcripts. The next piece of data the researcher collected was students' attendance. The researcher compared the days the students attended from the 2008–2009 school year to the 2009–2010 school year. The third piece of data the researcher collected was dropout data. The researcher chose to compare the dropout rate prior to the implementation to the data after the implementation of the A+LS. Therefore, a determination could be made as to the effectiveness of this intervention strategy for at-risk students in an alternative high school. Finally, the last piece of data the researcher gathered was early graduation data. This data compared the number of students who applied to the superintendent of schools to graduate prior to finishing their fourth year of high school. Students were able to graduate early by earning enough academic credits to fulfill the district and Missouri state high school graduation requirements. The researcher realized that a number of students had applied and graduated early upon going to the school to complete the quantitative portion of this study.

The researcher compared and analyzed the 2008–2009 and 2009–2010 attendance data of days present for all 45 participants (see Table 5). The researcher compared and analyzed the academic statistics for all 45 participants for the school years 2008–2009 and 2009–2010 (see Table 6). The tables show the comparison of the students' academic credits and days present during the two comparative years. The data for both academics and attendance are low due to the number of students who graduated early and dropped or transferred to the Missouri Options Program.

Table 5

*Attendance Comparison for all 45 students*

	Days Present 2008-2009	Days Present 2009-2010
Mean	141.1666667	94.97777778
Median	149	93.5
Standard Deviation	30.17524572	46.90088141
Sample Variance	910.5454545	2199.692677

Table 6

*Academic Achievement for all 45 students*

	Credits Earned 2008-2009	Credits Earned 2009-2010
Mean	6.455556	6.05556
Median	7	6
Standard Deviation	1.738018	2.864799
Sample Variance	3.020707	8.207071

The researcher ensured the confidentiality of all documents collected for this study. All of the participants were also kept anonymous throughout the study. The researcher utilized a random generator to gather a random sample representative of the population. A simple random sample was deemed to be most effective for this study. The researcher chose to take a sample of 15 participants of the 45 available participants

to complete the quantitative data in order to get a valid conclusion on the entire sample.

The researcher utilized a confidence level of 95% for all statistical analysis. Table 7 shows data for credit earned for the 15 randomly sampled participants. Table 8 shows the data for days present for the 15 random sampled participants.

Table 7

*Academic Achievement Comparison of the 15 Random Samples*

	Credits Earned 2008-2009	Credits Earned 2009-2010
Mean	5.96	7.03
Median	6	8
Standard Deviation	1.817	2.37
Sample Variance	3.3	5.62
Minimum	2	2
Maximum	8	11.5
Count	15	15

Table 8

*Attendance Data Comparison of the 15 Random Samples*

	Days Present 2008-2009	Days Present 2009-2010
Mean	137.4	92.2
Median	148.5	76
Standard Deviation	35.91	40.29
Sample Variance	1289.6	1622.9
Minimum	72	27
Maximum	191	165.5
Count	15	15

*Statistical Tests Performed**Academic Credit*

The statistical test performed for the academic achievement data was a *t* test for the difference between two sample means. Prior to completing this statistical analysis, an *f* test was completed to determine if there was a difference in variance. The researcher conducted a *t* test to determine if there was a difference in means.

The researcher then performed an *f* test on the academic credit to determine if there was a difference in variance. Table 9 indicates the specific data utilized in the *f* test and shows that the test supported there was no difference, so a *t* test for difference in means for two samples with equal variance was utilized to determine the statistical analysis for Hypothesis 1. Null hypothesis for the *f* test: There will be no difference in

the variance of the average number of course credits earned before implementation of the A+LS to the average number of course credits earned after implementation.

Table 9

*F Test Two-Sample for Variances*

	Variable 1	Variable 2
Mean	7.266667	5.966667
Variance	3.92381	3.302381
Observations	15	15
<i>df</i>	14	14
<i>F</i>	1.188176	
<i>P(F&lt;=f)</i> one-tail	.0375747	
<i>F</i> Critical one-tail	2.483726	

The *f* test value of 1.18 compared to the F-Critical Value of 2.48 indicates that the null hypothesis is not rejected. Hence, the variance for the two samples is considered to be equal.

Null hypothesis 1: Implementation of the A+LS online instruction with at-risk students in an alternative high school will not result in an increase in academic achievement as measured by a comparison of the number of course credits earned before implementation to the number of course credits earned after implementation.

The descriptive statistics shown in Table 10 indicate the specific data utilized in the *t* test. As Table 10 shows, the researcher rejected the first null hypothesis, which

supports that there is a statistically significant increase in the number of academic credits earned with the implementation of the A+LS. The hypothesis was rejected as a result of the test value of 1.87 falling into the one tail critical region beyond the critical value of 1.70. The researcher found evidence to support a significant increase in the number of academic credits earned following implementation of the online learning system.

Table 10

*T-Test: Two-Sample Assuming Equal Variances*

	Variable 1	Variable 2
Mean	7.266667	5.966667
Variance	3.92381	3.302381
Observations	15	15
Pooled Variance	3.613095	
Hypothesized Mean Difference	0	
<i>df</i>	28	
<i>T</i> Stat	1.872985	
<i>P</i> ( <i>T</i> ≤ <i>t</i> ) one-tail	0.035773	
<i>T</i> Critical one-tail	1.701131	

*Attendance*

The statistical test performed for attendance data was a *t* test for the difference between two sample means. Prior to completing this statistical analysis, an *f* test was completed to determine if there was a difference in variance. The researcher then completed a *t* test to determine if a difference in means existed.

Null hypothesis for the *f* test: There will be no difference in the variance in the number of days present before implementation of the A+LS when compared to the variance in the number of days present after implementation.

The researcher performed the *f* test on the students' days present to determine if there was a difference in variance. Table 11 shows the specific data utilized in the *f* test and shows that the test-value of .79 compared to the critical value of 2.48 failed to reject the null hypothesis. Therefore, the test supported there was no difference in variance, so a *t* test for samples with equal variance was utilized to determine the statistical analysis for Hypothesis 1.



Table 11

*F Test Two-Sample for Variances*

	Variable 1	Variable 2
Mean	137.4	92.2
Variance	1289.614	1622.957
Observations	15	15
<i>df</i>	14	14
<i>F</i>	0.79	
<i>P</i> ( <i>F</i> ≤ <i>f</i> ) one-tail	0.336	
<i>F</i> Critical one-tail	2.48	

Null hypothesis 2: Implementation of the A+LS online instruction with at-risk students in an alternative high school will not result in an increase in student attendance rate, as measured by a comparison of the student attendance rate before to the student attendance rate after implementation. The descriptive statistics shown in Table 12 indicate the specific data utilized in the *t* test. As Table 12 shows, the researcher did not reject the null hypothesis. Therefore, the statistics did not support the implementation of the A+LS and did not show a significant increase in student attendance. The test value of -3.24 did not fall into the critical value of the test, so the null hypothesis was not rejected.

Table 12

*T-Test: Two-Sample Assuming Equal Variances*

	Data 1	Data 2
Mean	92.2	137.4
Variance	1622.957	1289.614
Observations	15	15
Pooled Variance	1456.286	
Hypothesized Mean Difference	0	
<i>df</i>	28	
<i>T</i> Stat	-3.244	
<i>P</i> (T<=t) one-tail	0.002	
<i>T</i> Critical one-tail	1.701	

*Dropout and Early Graduation Data*

The researcher utilized a  $z$ -test for difference in proportions to analyze the dropout and early graduation data. Null Hypothesis 3: Implementation of the A+LS online instruction with at-risk students in an alternative high school will not result in a decrease in the dropout rate at the alternative school as measured by a comparison of the dropout rate before implementation to the dropout rate after implementation.

The data indicated that there were 10 dropouts out of 96 enrolled students in 2010 and 35 dropouts out of 119 enrolled students in 2009. After completing the  $z$  test for

comparing two proportions the  $z$  test value was -3.38. The critical value was a -1.65 (see Table 13). Therefore, the researcher rejected the null hypothesis and supported that there was a significant difference in the dropout rate since the implementation of the A+LS. Through observation, the researcher verified that the difference was a decrease in the dropout rate during the second year.

Table 13

*Z-test for Difference in Proportions for Dropout Data*

Confidence Level	95%
Group 1	
Base Size	96
Proportion	10 (10.42%)
Group 2	
Base Size	119
Proportion	35 (29.41%)
Z-Value	3.38
Z-Critical	1.65

(Z-Test for Two Proportions Calculator, 2005)

The researcher statistically analyzed Hypothesis 4 by using a  $z$  test for differences in proportion. Null hypothesis 4: Implementation of the A+LS with at-risk students in an alternative high school will not cause an increase in the amount of early graduation applications, as measured by a comparison of the early graduation applications prior to the implementation of the A+LS to those following implementation.

There were four students in 2009 who applied for early graduation out of 119 students enrolled. In 2010 there were 11 students out of 96 enrolled students. Therefore, after the test was computed, the  $z$  test value was a 2.31 with a  $z$  critical value of a 1.65 (see table 14). The researcher rejected the null hypothesis and supported that the proportion of students applying for early graduation significantly increased in year two compared to year one.

Table 14

*Z-test for Proportions Early Graduation Data*

Confidence Level	95%
Group 1	
Base Size	96
Proportion	11 (11.45%)
Group 2	
Base Size	119
Proportion	4 (3.36%)
Z-Value	2.31
Z-Critical	1.65

(Z-Test for Two Proportions Calculator, 2005)

*Response to Student Survey*

The researcher also conducted a  $z$ -test for proportion on the student perspective survey of the A+LS. The researcher compared the proportion of responses to the completely agreed and the somewhat agreed categories to the proportion of responses to

the completely disagreed and the somewhat disagreed categories. Null hypothesis: There will be no difference in the proportion of responses in the completely agree and somewhat agree categories and the proportion of responses in the completely disagree and somewhat disagree categories on the student perspective survey of the A+LS.

Table 15

*Z-test for Proportions Likert Scale*

Confidence Level	95%
Group 1	
Base Size	486
Proportion	142 (29.22%)
Group 2	
Base Size	486
Proportion	37(7.61%)
Z-value	8.608

(Z-Test for Two Proportions Calculator, 2005)

Once the statistical analysis was completed, the  $z$  value was 8.6 and the critical value was 1.96 (see table 15). The researcher rejected the null hypothesis that there was no difference between the proportion of students who agreed with the statements to the proportion of students who disagreed with the statements on the student perspective survey of the A+LS. The research supported that the difference between the proportion of students who agree and the proportion of students who disagree was statistically significant.

*Summary*

Analysis of the quantitative data from this study resulted in the decision to reject null hypotheses 1, 3, and 4 and the conclusion that alternative hypotheses 1, 3 and 4 were supported. Null hypothesis 2 failed to be rejected. The researcher conducted a  $t$  test for difference in means on the academic achievement data (credits earned) hypotheses 1; the null hypothesis was rejected because there was a statistically significant increase in credits earned since the implementation of the A+LS. The same  $t$  test for difference in means was conducted on the attendance data (number of days present), hypothesis 2, this test failed to reject the null hypotheses, and did not support that there was a statistically significant increase in attendance due to the implementation of the A+LS.

The next set of tests included a  $z$  test for difference in proportions. The researcher performed these tests to distinguish if there was a significant change in the dropout rate and early graduation applications when comparing the two academic years. After the two tests were conducted, the null hypothesis was rejected in both cases. The dropout data showed a statistically significant decrease. While the early graduation data supported the proportion of early graduation applications, they significantly increased in year two compared to year one of the study.

The researcher conducted a  $z$  test for proportions on the student perspective survey, 5-point Likert scale. The null hypothesis was rejected as a result of the survey results, supporting the difference between the proportion of responses in the agreement categories and proportion of responses in the disagreement categories as being statistically significant. The majority of the students were positive in their responses to

how the program allows them to work at their own pace and on their own learning plan, allowing students to earn credits at an increased rate and to graduate earlier. For the most part the students were pleased with the student–teacher interaction, and one-on-one instruction provided.

## Chapter Five: Discussion

A growing concern in the United States is the number of high school students who are failing to earn their high school credentials and are dropping out of school. Just about one third of the country's high school students leave school prior to graduation (Barton, 2006). The researcher conducted a study to determine if implementing a computer-based curriculum in an alternative high school would increase academic achievement, increase student attendance, and decrease the dropout rate at the alternative high school, along with increasing the students' motivation to graduate. This chapter also provides an understanding of what the researcher was attempting to accomplish throughout the research and the process utilized to conduct the research. The remainder of the chapter will provide a discussion on the findings and any implications for these results. The researcher will also provide recommendations for future research studies.

The researcher felt there was a need for this study for two reasons. Students are "digitally wired" and crave technology as a means of learning (Pensky, 2001). According to Jukes et al. (2010), nearly 60% of students in schools fail to be auditory- or text-based learners. Jukes et al. (2010) goes on to mention, more and more, due to the amount of digital exposure, students think graphically, and have adapted to be either visual or visual kinesthetic learners, or a mix of the two. Jukes et al. (2010) also stated that since students are digitally wired, they are frequently bored and disinterested and tune out old teaching methods. The researcher believes schools will be compelled to connect with the students and seek a better way to make school interesting and exciting.



The second reason is that the high school dropout rate has increased. The researcher desired to determine whether A+LS implementation in an alternative school helped to increase academic achievement, increase student attendance and decrease student dropout rates, therefore, motivating the student to graduate from high school. If the program was found to positively influence alternative student retention rates and increase graduation rates at the alternative school, then implementation of the program could be expanded into traditional high schools within the district to dissuade students from dropping out or transferring to the alternative high school option. The researcher also believed that this research could be beneficial to all school districts within the United States since the dropout problem seems universal.

#### *Review of the Methodology*

The comparative study was conducted to evaluate the implementation of the A+LS into the district's alternative learning center during the 2009–2010 school year. The study compared the 2008–2009 school year, when direct instruction was utilized, to the 2009–2010 school year when the A+LS was installed into the alternative learning center for math, communication arts, science, history and a number of the elective courses. The researcher studied 45 students and 4 staff members who had been members of the alternative school for both the 2008–2009 and 2009–2010 school years. As described in chapter 3, for the purposes of the study a mixed methods approach was utilized. Quantitative data was retrieved for both years on all of the students, to compare student attendance, academic achievement, dropout data and early graduation requests. The qualitative portion of the research included; the students participated in a student

perspective survey, and a sample of the students and all four staff members participated in an interview.

### *Quantitative Findings*

Early graduation request data supported that the proportion of students applying for early graduation significantly increased in year two of the study compared to year one. Dropout data supported that there was a significant difference in the dropout rate since the implementation of the A+LS. In observation, the researcher verified that there was a decrease in dropout rates during the second year, although the results of the  $z$  test for difference in proportions supported that the size of the decrease was not statistically significant.

Upon reviewing the dropout data the researcher noticed a decrease in the numbers of dropout over the previous year. The researcher after speaking with the principal of the school learned that the State of Missouri officials enacted a change in their dropout law for the 2009–2010 academic year. State law 167.031 “The term ‘compulsory attendance age for the district’ shall mean seventeen (17) years of age or having successfully completed sixteen (16) credits towards high school graduation in all other cases.” (MODESE, 2009a, para. 2). The previous law allowed students to dropout at the age of sixteen.

Another possible reason for the drop in numbers was that during the 2008–2009 school year Missouri options program dropouts were included in the overall number of dropouts for the school. During the 2009–2010 school year, the Missouri options drops were not included in this data. It is unknown at this time how many students dropped out

of the Missouri Options program as the data were unavailable. To get an accurate statistical analysis of the effectiveness of the A+LS in deterring dropouts, the situation would need to be studied for at least another year to two years. With regards to the academic achievement data, there was a statistically significant increase in the number of academic credits earned with the implementation of the A+LS. The students and teachers both during the interview agreed, the program motivated a number of students to earn extra credits, so they could graduate early. This was apparent when the researcher attempted to complete the qualitative portion and found 15 students out of the 45 had already finished their graduation requirements by the end of the third semester. Attendance data shows that the statistics do not support that the implementation of the A+LS contributed to a significant increase in student attendance. During the interviews, the staff members agreed student attendance did not improve after the implementation. The student interviews were mixed, some participants stated the A+LS program motivated them to attend more frequently than in the past, while others mentioned they missed more days during the school year after the implementation of the A+LS system. This was because of their dislike for the A+LS and the disconnect they felt from their teachers.

### *Qualitative Results*

The study also researched student and staff perceptions of the implementation of the A+LS. The overarching research question was, to what extent does implementing the A+LS online instruction in an alternative high school actually increase academic achievement, increase attendance, and decrease the dropout rate?

As was detailed in chapter 4, the themes that arose from the student participant interviews were; student–teacher relationships, academic achievement (credits), self paced program, motivation, and college and workplace preparation.

### *Staff Themes*

Staff themes included students working at their own pace, student motivation, and that student attendance had not increased.

#### *Students working at their own pace*

As an examination and coding of interviews took place, themes appeared from the perspective of the staff members of the alternative high school. The consistent theme stated by the staff members interviewed was the ability for the students to work at their own pace, which allowed them to earn more academic credit, and allowed the teachers to work one on one with students who needed assistance.

There was an emphasis placed on the importance of students being able to work at their own pace. This allowed the majority of students to become more engaged in their studies, earn more credits, and allowed a number of students to graduate earlier than expected. Students were able to focus and learn at an increased rate, according to the staff. One of the benefits to students being able to work at their own pace was that once a student is finished with a course, they student can begin a new course immediately. There is no downtime as students are on individual learning plans.

Embedded within student ability to work at their own pace was the ability for the teachers to provide individualized help to students who were struggling with the content of the A+LS. Staff members felt use of the A+LS gave them the opportunity to provide

more one-on-one help to individual students rather than having to focus on the whole class, as they did in direct instruction.

*Student attendance has not increased due to the program*

The staff members interviewed all had past experience working with at-risk students. The teachers agreed that implementing the A+LS had not motivated students to come to school on a more regular basis. Staff members mentioned that some of the students seemed to be more motivated than others when they realized the program was a credit recovery program. Others mentioned that students realized how to “work the program” and figured out how many days they could miss and still finish their coursework for the semester, therefore, missing more days than last year. Staff members also commented that students know they will suffer no consequences as a result of excessive absences.

*Student motivation*

Staff members discussed student motivation. When it came to attending school, students were either motivated or not motivated. However, once they were at school, the majority of the students were motivated and focused to work hard to finish their courses. Some of the students struggled at first to figure out how to get motivated and to work at their own pace. Students who fought back the most were students who had attended the alternative school during the first year of the study. These students were use to direct instruction and failed to adapt to the implementation of the A+LS. The students who transferred to the alternative school from one of the three traditional schools adjusted to the A+LS and were motivated to work and learn.

Upon finalizing the student and teachers interviews, the staff felt strongly that the A+LS did not contribute to an increase student attendance, while a number of the students felt their attendance had improved. Both the students and teachers enjoyed the A+LS due to the individualization and self-paced program. This provided the teachers with an opportunity to help the students one-on-one. Both the students and staff agreed the A+LS had contributed to decreased student discipline problems, and that overall student motivation had increased since implementation of the program.

As was detailed in chapter 4, the student participants took a survey. The researcher rejected the null hypothesis that there was no significant difference between the proportion of students who agreed with the statements and the proportion of students who disagreed to the statements on the student perspective survey concerning use of the A+LS. The researcher supported that the difference between the proportion of students who agreed and the proportion of students who disagreed was significantly statistical. The researcher noticed and found interesting that the majority of students agreed the A+LS motivated them to finish school, therefore, allowing them to earn more credits. Approximately 45% of the students found the A+LS enjoyable, while only 18% did not find the program enjoyable. The researcher noticed the majority of the student did not find the A+LS challenging, this was the same perception the majority of the staff gave with regards to the A+LS. The staff felt the curriculum should have been more rigorous, and thus is planning on adding rigor and components to the A+LS program.

The researcher, after studying the quantitative data, realized a number of students earned extra as many as 11.5 credits in one school year. This is indicative that the

curriculum may have been too easy, and students were able to rush through the lessons and earn the academic credit. The students were able to earn 8.0 credits during the 2009–2009 school year at the alternative school. The results from the qualitative and quantitative data conflict with regard to student attendance; only 22% of the students answered that the A+LS did not motivate them to attend school on a more consistent basis. The students perceived they were attending more; however, the quantitative data did not support this statement. This could have been due to the researcher being a former employee of the school. Therefore, the students may not have been honest with the researcher. The researcher discovered that only 3.7% (1 student) stated they would not recommend the A+LS to someone who was going to dropout. Therefore, the vast majority of the students who took the survey would recommend the A+LS to others who were considering dropping out of school. This is interesting since a number of students who participated in both the survey and interview were totally against the A+LS program and mentioned they did not like the A+LS.

### *Implications*

Through the use of NCLB, legislators mandated that all schools reach 100% of their students scoring within the proficient or advanced levels on state assessments by the year 2014 (Anderson, 2005; NCLB, 2003; Hall, 2007). This law also has additional indicators, affecting the categories of graduation rate and attendance (Anderson, 2005; NCLB, 2003; Hall, 2007). The researcher believes for schools and districts to reach this goal every year, and the 100% mark by 2014, administrators in each district and school in

the United States must revise their strategies to examine their approach to working with their at-risk population.

Implementation of the A+LS into the district's alternative school was one method of trying to intervene and increase the academic achievement of the at-risk high school student population. Since its inception, alternative schools have been educating students in the same fashion as traditional schools, just in a smaller facility with smaller class sizes (Leiding, 2008). The school officials continued to notice the same indicators with the at-risk students in the alternative school as they were at the traditional school. Student attendance was low, and there were a high percentage of dropouts and failing grades.

Once the school year began, staff members were trained on the A+LS. The first semester was a learning process for the staff and the students, due to this being a new program for all stakeholders. The district had previously adopted the professional Learning Communities model. In the past alternative teachers have utilized their common plan time to talk about data, student academic achievement, common formative and summative assessments. In the 2009–2010 academic year the staff took a different approach. They talked about interventions and how to make the students successful. They discussed students who were not succeeding with the A+LS and those who were not completing their lessons. Teachers had an intervention room designed for students who were not successful. These students received more one-on-one support, could not listen to music while working on their lessons, and were made to focus primarily on finishing their lessons.



Student attendance had always been an issue at the alternative school. After the implementation of the A+LS, attendance did not improve. At certain points in the semester, attendance would spike and at certain times it would dip. In the past, all of the high schools were able to take academic credit away from students for missing a certain number of days; the administration is looking to reinstate this policy for the upcoming year. However, administrators have also developed a principal advisory committee. This committee meets with the principal once a semester to voice their concerns about the school.

After the implementation of the A+LS and during the scheduling for the 2010–2011 school year, the students were concerned that all the computer courses were held in the afternoon, and all direct instruction courses, such as elective courses, were held in the morning. Students wanted more elective courses in the afternoon. The administration listened to the students and added more direct instruction courses to the 2010–2011 school calendar.

The staff also collaborated throughout the first year of implementation and realized that a number of the courses within the A+LS did not have enough rigor. As a result, additional writing components were added to a number of the courses. Teachers also added a writing common assessment to the midterm and the final for the students. Another aspect the staff added to the curriculum was note taking; therefore, the students were required to take notes during each of their A+LS course activities. Their notes were worth 10% of their final grade.

At the end of the first year of implementation, the staff members met to discuss the pros and cons of the A+LS program. They looked at the total picture and realized they had a lot of students who finished courses quickly. They were curious as to how much of this information students retained. Therefore; the decision was made to add more project-based assignments to each of the courses as part of the final assessments. This would give staff an enhanced understanding of the knowledge the students have gained through the course of instruction.

The staff also realized the number students failing courses decreased with the implementation of the A+LS, while the A's, B's, C's and D's all increased after the introduction of the A+LS. However, the staff realized they needed to discuss and implement attendance interventions to improve student attendance.

After seeing the academic improvements at the alternative school, the district has begun offering the A+LS to the other three traditional schools in the district on a limited basis. Computer learning is available for students to earn academic credit, to make up courses they may have failed, or to take a class they still need to graduate. There are not as many courses offered at the traditional schools as there are at the alternative schools. This is also being offered as part of the summer school middle and high school curriculum.

#### *Recommendations for Future Studies*

The research conducted has several limitations, including the selection of subjects and history, mortality, regression, and survey instrumentation. The selection of subjects was limited in this survey as only students who were enrolled in the alternative school

during the 2008 and 2009 school years were selected. This limited the number of participants and narrowed the statistical analysis for the study. To expand the number of participants, all the students entering the alternative school at the beginning of the school year could have been surveyed and considered participants.

Mortality became a real issue for the researcher. Upon conducting the research at the end of the third semester the researcher found that a number of the participants had already graduated and were unavailable to participate in the survey and interview. There were also a number of participants who were absent during the three days of research. Therefore, mortality was a factor in the number of surveys and interviews conducted. For future studies, the researcher could send an electronic link to the school during the first two quarters and have the students participate in the survey online.

The regression threat was also a concern to the researcher prior to the start of the study. This was because students were accustomed to direct instruction and a number of the students either dropped out or transferred back to their traditional school at the beginning of the school year due to the implementation of the A+LS. The key to successful implementation is to discuss the advantages with the students prior to the start of school. The administration could also offer informational nights to parents and students for discussion.

Instrumentation threat was a concern for the researcher due to the construction of the survey and interview instruments being utilized throughout the study. Every effort was made to minimize the internal validity threats throughout the research study. This survey was conducted by paper and pencil; the researcher then entered this information

into SurveyMonkey.com for analysis. In the future, the researcher will have the students conduct the survey online and display a line for additional comments. This will allow for more participation from the student body. The researcher will not have to be present for the students to take part in the survey. This also will ensure student anonymity.

The researcher checked the readability statistics of the survey in Microsoft Word; the Flesch Reading Ease was analyzed at 44.8, and the Flesch-Kincaid Readability was analyzed at a grade level of 12.1. In the future, the researcher would rewrite the survey because a number of students struggled with some of the vocabulary words used in the survey, such as implementation, motivated, and utilized.

The survey was conducted over a one-year period during the 2009–2010 school year. To create a more meaningful and statistically significant study, data should be collected over a longer period of time. Staff received minimal professional development prior to the implementation of the A+LS, which made it a difficult transition for both the staff and students. The researcher suggests that the staff receive professional development on the A+LS prior to the first day of school and be given professional development time prior to the student's arrival to ensure a smoother transition.

The successful implementation of the A+LS could be a useful tool to ensuring high school students are academically successful and graduate from high school. The researcher offers a few suggestions to allow for a more successful implementation process:

First, ensure a high-quality professional development program for the teacher. The school district must provide teachers and staff high-quality professional development

on the A+LS prior to, during, and after the implementation phase. Continual high quality professional development must be offered to teachers of at-risk students to ensure they receive the same training as their counterparts at traditional schools. Training should include 21st-century learning techniques and critical thinking strategies.

Second, after speaking with the staff, the school should develop a school schedule to include staff collaboration time. The staff must continue to have a common time to talk about the academic success of all students. They need to ensure they are collaborating on the rigor of the curriculum and how to make the A+LS meet the needs of their students. Alternative teachers should also be afforded to meet with their traditional counterpart to discuss curriculum and assessments. Alternative teachers should also be afforded an opportunity to serve on district committees such as technology and curriculum.

Another suggestion mentioned throughout the literature review is to make sure the staff and administration celebrates the success of the students and staff. Student and staff successes should be celebrated often. Staff should ensure they are celebrating the students' successes and making them feel special. They need to conduct weekly and daily celebrations with their students. In the digital world, students make decisions approximately every 1 to 2 seconds and are recognized for those decisions every 7 to 10 seconds. In the education world, a student makes a decision about once every 25 minutes and recognition is far less frequent (Jukes et al., 2010).

School and district administrators should develop the school schedule and plan to include small school size. Another key factor that some small schools can offer is the ability to provide students with the right to be heard in the decision making issues of the

school (Lang & Sletten, 2002). This seems to give students a feeling of ownership and aids in making them feel they are an essential member of the overall school population (Lang & Sletten, 2002). Continuing to fulfill the standards of the principal advisory committee and listen to the students and ideas is important to keeping students involved in the school process. Research indicates that alternative schools and at-risk students need to be connected with their teachers (Bridgeland et al., 2006, Lange & Sletten, 2002). The research study has indicated that a number of students have felt a “disconnect” with their teachers after the implementation of the A+LS. Professional development should be provided that ensures the teacher can make the transition from teacher to tutor, coach and mentor, along with being available to give students individualized attention and one-on-one teaching. The teacher should still be available for the students, should make personal connections and develop a relationship with the at-risk students in the alternative setting.

Differentiation should be utilized during the teaching of both the online and direct instruction class. “The intent of differentiating instruction is to maximize each student’s growth and individual success by meeting each student where he or she is and assisting in the learning process.” (Hall et al., 2009, p.3). Teachers should differentiate their instruction in order to meet the needs of all the students. Differentiation ensures different teaching strategies are being utilized to meet the diverse needs of all students (Hall et al., 2009). Differentiated instruction recognizes that all students are not alike, and the one size fits all approach does not work with all students.

Student attendance, instead of going back to taking away credit for student attendance issues, which is only a punitive measure, the administration should find

positive ways to celebrate and encourage students who attend school. Student attendance and successes should be celebrated frequently. Teachers should also discover why students are not attending school; are they disconnected? Are they bored? Teachers and administrators should make school exciting and make instruction geared around real world activities. The administrator should go to the student body and determine why they miss so much school. Ask them, what would make you attend school? One of the identified problems is that students are digitally connected and many of these students are disconnected because teachers do not teach to their individual style. One option the administration could offer students when they are absent is the opportunity of signing on to the computer and working on the A+LS from home. If a student is absent and logs on and completes a number of assignments from their home, they could earn an excused absence for the day, rather than an unexcused absence.

The researcher, using the literature review, found when the administration reviewed the mission, vision, values and goals of the school with the students, staff, and parents and sought their input for change, the school developed a positive bond and buy in from the stakeholders. They should then write their goals for the year as a community. This would ensure buy-in from all stakeholders and give students the voice the literature review recommended they have at the alternative school. Students were not setting goals for themselves, therefore, teachers should teach students how to develop and write goals for their academic success.

Allow enough time to go through the implementation dip; throughout time, educators have been known to adopt a new initiative, implement the idea or program for a

year or two, and then switch to another initiative. These changes are normally due to a lack of change or a perceived sense of success in the organization. However, inadequate time is normally given to an initiative to see any type of success. Fullen (2004), mentions, change is “a process and not an event,” it takes time to implement change in an organization (p. 51).

Reading levels, the school should test the students’ reading level at the time they are accepted into the program. This will ensure the students do not struggle with the curriculum and the reading comprehension of the program due to the students’ individual reading levels. If the student’s reading level is considered low, the school should offer interventions to help the students succeed.

Project-based learning should be included in a number of lessons within the A+LS during the 2010–2011 school year. Teachers should ensure these are collaborative, critical thinking and technology based projects. This will help prepare students with 21st-century skills needed in the work force and college. Students need to learn to feel comfortable working on technology and working with others on a project. This type of collaboration occurs both in the classroom and outside the classroom, with someone who is not physically in the room working on their project. The students could work on a computer-based learning project with another classmate, but instead of collaborating face-to-face, they are required to collaborate and send all the information, pictures, and PowerPoint via the Internet.

The researcher, after working in a middle school setting and with at-risk elementary students, believes the district should expand their Type 1 alternative program



to middle school students. The researcher has witnessed at-risk elementary and high school students struggle in the traditional school and believes having an alternative program for middle school students would ensure success. Bridgeland et al. (2006) mentioned students did not feel prepared as they entered high school. Opening a middle school alternative program would give students who are struggling and opportunity for smaller class sizes, individual attention and a chance to build a relationship with their teachers (Bridgeland et al., 2006).

#### *Further Research*

The researcher would like to see the A+LS studied over a longer period of time to determine whether there is a significant impact on at-risk students, their academic achievement levels, attendance levels, and most of all, increasing the graduation rate and decreasing the dropout rate of high school students. The researcher believes one year was not adequate to determine whether this program had a strong statistical positive impact on the at-risk population. The researcher would like to see a 3- to 5-year comparative study conducted to determine a significant study.

The researcher would also recommend the research population of both students and staff be broadened to all students in the alternative high school. The researcher utilized a small population; it would have been interesting to see the results with the students who had transferred from the traditional school to the alternative school or a comparative study of the traditional students and the alternative high school students. Doing additional research on different categories and subgroups would make the research and findings more interesting.

The data could also be expanded to determine the effect on behavior and whether the A+LS had a positive or negative impact on student behaviors. There were a number of comments by the staff stating that they had perceived the students behaviors had improved. Therefore, statistically studying whether this is a factor would be interesting. The researcher would also recommend for further research to conduct the survey online, as this would be easy to send to the students who are already utilizing a computer and online application program. This will also allow students to be honest in their responses, rather than having the researcher sitting in the room while they are answering the questions.

#### *Summary*

One of the federal government officials' major commitments to education is to increase the graduation rate and decrease the dropout rate. President Obama stated that "dropping out of high school is no longer an option. It's not just quitting on yourself, it's quitting on your country—and this country needs and values the talents of every American" (Colvin, 2010, para. 2). The study was focused on one of the many alternatives that are available to school districts to encourage students to stay in school and eventually earn their high school diploma. Administrators of schools and school districts must strive and work hard to find alternatives to encourage students to stay in school, because as Jukes et al. (2010) stated,

The definition of insanity is doing things the same way we've have always done, but expecting, wanting, or needing completely different results. If we continue to

teach the same way, we will continue to get the same results, and in doing so, we will fail our children” (p. 29).

The review of the literature and the results after one year have convinced this researcher that online education can be a viable option for educating at-risk students if implemented properly.

*References*

- American Education Corporation. (2006). A+ K-12 and Adult Learners assessment & curriculum courseware. *Product Catalog*. Oklahoma City, OK. USA. American Education Corporation.
- Ahearn, E. (2004). *Alternative Schools and Students with Disabilities: Current Status and Emerging Issues*. Retrieved from Project Forum: [www.projectforum.org](http://www.projectforum.org)
- Alliance for Excellent Education. (2009a, July). *Graduation Gaps and Inequities*. Retrieved from Alliance for Excellent Education: <http://www.all4ed.or>
- Alliance for Excellent Education. (2009b, July). *Graduation Rates*. Retrieved from Alliance for Excellent Education: <http://www.all4ed.com>
- Alliance for Excellent Education. (2009c, July). *Understanding High School Graduation Rates in the United States*. Retrieved from Alliance for Excellent Education: <http://www.all4ed.com>
- American Council on Education (ACE). (2009, December). *2008-2009 GED Options Statistical Report*. Retrieved from American Council on Education (ACE): [Http://www.acenet.edu](http://www.acenet.edu)
- Anastos, E. (2003). Providing quality instruction in alternative settings. *Leadership*, 33(2), 37–38. [Http://search.ebscohost.com](http://search.ebscohost.com)
- Anderson, L. W. (2005, April 4). The No Child Left Behind Act and the Legacy of Federal Aid to Education. *Education Policy Analysis Archives*, 13(24). Retrieved from <http://epaa.asu.edu/epaa/v13n24/>.

- Arnoldly, B. (2008, May 14). *As virtual schools grow, calls for more oversight*. Retrieved from The Christian Science Monitor: [www.csmonitor.com](http://www.csmonitor.com)
- Ash, K. (2009, June 16). *Characteristics of Highly Qualified' Online Teachers*. Retrieved from Education Week Digital Directions: [www.edweek.org/dd/articles/2009](http://www.edweek.org/dd/articles/2009)
- Azzam, A. (2007, April). Why Students Drop Out. *Educational Leadership*, 64(7), 91–93. [Http://search.ebscohost.com](http://search.ebscohost.com)
- Azzam, A. (2009). Why Creativity Now? A Conversation With Sir Ken Robinson. *Educational Leadership*, 67(1), 22–26.
- Baker, J., & Sansone, J. (1988). *Interventions for Students At-Risk for Dropping Out of School: Association of American Education Research: Paper Presented at Annual Meeting of the American Education Research Association, New Orleans, LA* (pp. 1-20). Retrieved from ERIC database. (ED310501)
- Baker, M. L., Sigmor, J. N., & Nugent, M. E. (2001). *Truancy reduction: Keeping students in school*. Retrieved from Juvenile Justice Bulletin: [www.ncjrs.gov](http://www.ncjrs.gov)
- Barton, P. E. (2006). *One-third of a Nation: Rising Dropout Rates and Declining Opportunities*. Retrieved from ERIC database. (ED45192)
- Beecher, M., & Sweeney, S.M. (2008). Closing the Achievement Gap with Curriculum Enrichment and Differentiation: One School's Story. Retrieved from ERIC database. (EJ810785)
- Bennett, R. V. (1972). *Cardinal Principles Report: An Educational Classic*. Retrieved from ERIC database. (ED073079)

- Bhanpurih, H & Reynolds, G.M. (2003). *Understanding and Addressing the Issue of the High School Dropout Age*. Retrieved from North Central Regional Educational Laboratory: [Http:// www.ncrel.org](http://www.ncrel.org)
- Bloland, P. A. (1992). *Qualitative Research in Student Affairs*. Retrieved from ERIC database. (ED347487)
- Boudett, K. P., Murnane, R. J., City, E., & Moody, L. (2005, May). Teaching Educators: How to Use Student Assessment Data to Improve Instruction. *Phi Delta Kappa*, 86(9), 700–706. [Http://search.ebscohost.com](http://search.ebscohost.com)
- Bracey, G. W. (2006). High drop-out rates: Fact or myth? *Principal Leadership (High School ed.)*, 7(1), 59–61. [Http://search.ebscohost.com](http://search.ebscohost.com)
- Bracey, G.W. (2009). Those Oh, Elusive Graduation Rates. *Phi Delta Kappan*, 90(8), 610–611. [Http://search.ebscohost.com](http://search.ebscohost.com)
- Bridgeland, J. M., Dilulio, J. J., & Morison, K. B. (2006, March). *The Silent Epidemic*. Retrieved from Civic Enterprises: [www.civicenterprises.net](http://www.civicenterprises.net)
- Bridgeland, J. M., Dilulio, J. J., & Balfanz, R. (2009, November). The High School Dropout Problem, Perspectives of Teachers and Principals. *Educational Digest*, 75(3), 20–26. [Http://search.ebscohost.com](http://search.ebscohost.com)
- Brogan, R. (2007). *Threats to Internal Validity*. Retrieved from Psycho Metric: <http://www.psychmet.com/index.html>
- Brown, B. (1981, October). *PLATO promises grade gains*. Tallahassee, Florida, USA. [Http://search.ebscohost.com](http://search.ebscohost.com)

- Brozo, W. G. (2009). Response to Intervention or Responsive Instruction? Challenges and Possibilities of Response to Intervention for Adolescent Literacy. *Journal of Adolescent and Adult Literacy*, 53(4), 277–301. [Http://search.ebscohost.com](http://search.ebscohost.com)
- Buffum, A., Mattos, M., & Weber, C. (2009). *Pyramid Response to Intervention*. Bloomington, IN: Solution Tree.
- Bullock, L. M. (2007). Introduction to the Special Issue: Ensuring Student Success Through Alternative Success. *Preventing School Failure*, 51(2), 3–4. [Http://search.ebscohost.com](http://search.ebscohost.com)
- Burgess, L.A., Strong, S. D. (2003). Trends in Online Education: Case Study at Southwest Missouri State University. *Journal of Industrial Technology*, 19 (3), 1–5. Retrieved from ATMAE: <http://atmae.org/>
- Cameron, S. V., & Heckman, J. J. (1993). The Nonequivalence of High School Equivalents. *Journal of Labor Economics*, 11(1), 1–47. [Http://search.ebscohost.com](http://search.ebscohost.com)
- Carver, P.R., & Lewis, L.. Tice, P. (2010, March). *Alternative Schools and Programs for Public School Students At Risk of Educational Failure: 2007–2008*. Retrieved from National Center For Education Statistics: [www.nces.ed.gov](http://www.nces.ed.gov)
- Character Education Partnership (CEP). (2010). *A Framework for School Success 11 Principles of Effective Character Education*. Retrieved from Character Education Partnership: <http://www.character.org>
- Chmelynski, C. (2006). Getting High School Dropouts Back in School. *The Education Digest*, 72(2), 38–41. <http://search.ebscohost.com>

- Christen, A. (2009). *Transforming the Classroom for Collaborative Learning in the 21st Century*. Retrieved from ERIC database. (EJ829507)
- Christensen, C. M., & Horn, M. B. (2008). *Disrupting Class: Student-Centric Education Is the Future*. Retrieved from Edutopia: <http://www.edutopia.org>
- Christensen, C. M., Horn, M. B., & Johnson, C. W. (2008). *Disrupting Class: How Disruptive Innovation Will Change the Way the World Learns*. New York, NY: McGraw Hill.
- Colvin, R. L. (2010, July 6). *What can we do about the dropout problem?* Retrieved from The HECHINGER REPORT: <http://hechingerreport.org>
- Conrath, J. (2001). Changing the Odds For Young People: Next Steps for Alternative Education. *Phi Delta Kappan*, 82(8), 585–587.  
<http://search.ebscohost.com>
- Cooper, L. W., (2001, March). *A Comparison of Online and Traditional Computer Applications Classes*. Retrieved from University Missouri – St. Louis (UMSL): <http://www.umsl.edu>
- Creswell, J. W. (2008). *Educational Research Planning, Conducting, and Evaluating Quantitative and Qualitative Research* (3rd ed.). Upper Saddle River, New Jersey: Pearson.
- Davidson, M., & Lickona, T. (2008). *Excellence & Ethics, Fall*, Retrieved from SUNY Cortland: <http://www2.cortland.edu>
- De La Rosa, D.A. (1998). Why alternative education works. *High School Journal*, 4, 268–273. <http://search.ebscohost.com>



- Dorn, S. (1996). *Creating the Dropout*. Westport, CT: Praeger Publisher.
- Dounay, J. (2006). Getting Young People to Do the Right Thing. *Phi Delta Kappan*, 88(3), 181–182. <http://search.ebscohost.com>
- Donlevy, J. (2003). Teachers, Technology and Training: Online Learning In Virtual High School. *International Journal of Instructional Media*, 30(2), 117–121. <http://search.ebscohost.com>
- Doyle, L. H., & Doyle, P. M. (2003). Building Schools as Caring Communities: Why? What, and How? *The Clearing House*, 76(5), 259-261. <http://search.ebscohost.com>
- Duke, D.L., & Griesdorn, J. (1999). Considerations in the Design of Alternative Schools. *The Clearing House*, 73(2), 89–92. <http://search.ebscohost.com>
- Edelman, M. W. (2010, October 18). *Celebrating the Children's Sabbath*. Retrieved from L.A. Watts Times: <http://www.lawattstimes.com>
- Elkind, D. H., & Sweet, F. (2004). *How to Do Character Education*. Retrieved from good character: <https://www.goodcharacter.com>
- Engel, D. E. (1994). Life after Dropping Out. *Presented at the Annual Meeting of the National Dropout Prevention Conference*, San Jose, CA (pp. 1-13). Retrieved from ERIC database. (ED371074)
- Engelmann, S., & Becker, W. (n.d.). *About Direct Instruction*. Retrieved from National Institute for Direct Instruction: <http://www.nifdi.org>

- Escobar-Chaves, S.L., Tortolero, S. R., Markham, C., Kelder, S. H., & Kapadia, A. (2002). Violent Behavior among Urban Youth Attending Alternative Schools. *Journal of School Health, 72*(9), 357–362. <http://search.ebscohost.com>
- Fink, A.G. (1995). *How to Ask Survey Questions*. London, United Kingdom: Sage Publications.
- Fowler, F. J. (2002). *Survey Research Methods* (3rd ed.). London, United Kingdom: Sage Publications.
- Fraenkel, J. R., & Wallen, N. E. (2006). *How To Design And Evaluate Research In Education* (6th ed.). Boston, MA: McGraw Hill.
- Foley, R.M , & Pang, L.S. (2006). Alternative Education Programs: Program and Student Characteristics. *The High School Journal, 89*(3), 10–21. <http://search.ebscohost.com>
- Fullan, M. (2004). *Leading in a Culture of Change*. San Francisco, CA: Jossey-Bass.
- History of Education*. (2008) Retrieved from Funderstanding: <http://www.funderstanding.com>
- Gardner, H. (1987). Theory of Multiple Intelligence. *Divergent Thinkers, 36*, 19–35. <http://search.ebscohost.com>
- GED Testing Service: Policies and Procedures Manual*. (2008). Retrieved from California Department of Education: [www.cde.ca.gov](http://www.cde.ca.gov)
- GED Testing Fact Sheet*. (2010). Retrieved from American Council on Education (ACE): <http://www.acenet.edu>

- Gerzel-Short, L., & Wilkens, E. A. (2009). Response to Interventions: Helping All Students Learn. *Kappa Delta Pi Record*, 45(3), 107–110.  
<http://search.ebscohost.com>
- Gibbs, G. R. (2010, February 10). *How and what to code*. Retrieved from Online QDA:  
<http://onlineqda.hud.ac.uk>
- Glatthorn, A. A., & Joyner, R. L. (2005). *Writing the Winning Thesis or Dissertation: A Step-by-Step Guide* (2nd ed.). Thousand Oaks, CA: Corwin Press.
- Green, E. (2009, September 16). *Understanding the Basics of Title I Funds*. Retrieved from Bright Hub: <http://www.brighthouse.com>
- Green, J.P (2002, April). *High School Graduation Rates in the United States*. Retrieved from Manhattan Institute for Policy Research: <http://www.manhattan-institute.org>
- Gregg, S. (1999). Creating Effective Alternatives for Disruptive Students. *The Clearing House*, 73(2), 107–113. <http://search.ebscohost.com>
- Grobe, W.J. (1999). Alternative Education That Works. *Principal Leadership (High School Ed.)*, 3(4), 46–49. <http://search.ebscohost.com>
- Guignon, A. (1998). *Multiple Intelligence: A Theory for Everyone*. Retrieved from <http://www2.educationworld.com>
- Gulek, C. (2003). Preparing for High Stakes Testing. *Theory in Practice* (42)1, 42-50.  
Retrieved from Project MUSE: <http://muse.jhu.edu>
- Gunn, T. M., Chorney, D. W., & Poulsen, J. C. (2009). *High school Completion: A Comprehensive Review of Projects Directed Towards Keeping Students in School*. Retrieved from ERIC database. (EJ861120)

- Hall, D. (2007). *Graduation Matters: Improving Accountability for High School Graduation*. Retrieved from ERIC database. (ED497689)
- Hall, T., Strangman, N., & Meyer, A. (2009) *Differentiated Instruction and Implications for UDL Implementation*. Retrieved from National Center on Accessible Instructional Materials: <http://aim.cast.org/>
- Hansen, J. B., & Torso, S. J. (2007). Gifted dropouts. *Gifted Child Today*, 30(4), 30–41. <http://search.ebscohost.com>
- Harlow, C. W. (2003). *Education and Correctional Population. Bureau of Justice Statistic Special Report*. Retrieved from ERIC database. (ED477377)
- Honigsfeld, A., & Dunn, R. (2009). Learning-Style Responsive Approaches for Teaching Typically Performing and At-Risk Adolescents. *The Clearing House*, 82(5), 220–224. <http://search.ebscohost.com>
- Honawar, V. (2004, November 16). *Higher Hispanic Dropout Rate Persists*. Retrieved From Education Week: <http://www.edweek.org>
- Hylen, M. (2008). *The Impact of a Character Education Based Interactive Discipline Program on At-Risk Student Behavior in an Alternative School* (Unpublished doctoral dissertation). University Missouri St. Louis, St. Louis, Missouri.
- Jacobs, H. H. (2010). *Curriculum 21: Essential Education for a Changing World*. Alexandria, VA: ASCD.
- Johnson, R. B., & Onwuegbuzie, A. J. (2003). Mixed Method Research: A Research Paradigm Whose Time Has Come. *Educational Research*, 33(7), 14–26. <http://search.ebscohost.com>

- Jukes, I., McCain, T., & Crockett, L. (2010). *Understanding the Digital Generation*. Charleston, SC: 21 Fluency Project.
- Kaufman, P. Alt, M. & Chapman, C. (2004, Nov). *Dropout Rates in the United States: 2001*. Retrieved from National Center For Education Statistics: [www.nces.ed.gov](http://www.nces.ed.gov)
- Kearsley, G., & Schneiderman, B. (1998). Engagement Theory: A Framework for Technology-Based Teaching and Learning. *Educational Technology*, 38(5) 20–23. <http://search.ebscohost.com>
- Kemp, C. R. (2005, February). Comprehensive Approach to Adolescent Literacy. *Principal Leadership*, 5(6), 22–27. <http://search.ebscohost.com>
- Kennedy, L. M. (2004). *Good for Nothing in Grade Retention*. Retrieved from ERIC database. (ED484914)
- Kennedy, C. (2000). *Implications for New Pedagogy in Higher Education: Can online Technology Enhance Student Engagement & Learning?* Retrieved from ERIC database. (ED443382)
- Kim, J. H. & Taylor, K. A. (2008). Rethinking Alternative Education to Break the Cycle of Educational Inequality and Inequity. *The Journal of Educational Research*, 101(4), 207–219. <http://search.ebscohost.com>
- Kleiner, B., Porch, R., & Farris, E. (2002, September). *Public Alternative Schools and Programs for Students At Risk of Education Failure: 2000–01*. Retrieved from National Center for Education Statistics: [www.nces.ed.gov](http://www.nces.ed.gov)
- Kurtus, R. (2004, April 4). *What is e-Learning*. Retrieved from School for Champions: <http://www.school-for-champions.com>

- Lange, C. M., & Sletten, S. J. (2002, February 1). *Alternative Education: A Brief History and Research Synthesis*. Retrieved from ERIC database. (ED462809)
- Leiding, D. (2008). *The Hows and Whys of Alternative Education: Schools Where Students Thrive*. Lanham, MD: Rowman & Littlefield Education.
- Lemke, C., & Coughlin, E. (2009). The Change Agents: Technology is empowering the 21st century student in four key ways. *Educational Leadership*, 67(7), 54–59.  
<http://search.ebscohost.com>
- Lickona, T. (1991). *Educating For Character: How Our Schools Can Teach Respect and Responsibility*. New York, NY: Bantam Books.
- Lickona, T. (1994). *Combating Violence with Values: The Character Education Solution*. Retrieved from Suny Cortland: <http://www2.cortland.edu>
- Lim, C. P. (2004). Engaging Learners in Online Learning Environments. *Tech Trends: Linking Research & Practice to Improve Learning*, 48(4), 16–23.  
<http://search.ebscohost.com>
- Lips, D. (2010). *How Online Learning is Revolutionizing K-12 Education and Benefiting Students*. Retrieved from The Heritage Foundation: [www.heritage.org](http://www.heritage.org)
- Manual to Combat Truancy*. (1996). Retrieved from ERIC database. (ED397526)
- McCray, E. D. (2006). It's 10 a.m.: Do You Know Where Your Children Are?  
*Intervention in School and Clinic*, 42(1), 30–33. <http://search.ebscohost.com>
- McKee, J., & Connor, E. (2007, December). Alternative Schools, Mainstream Education.  
*Principal Leadership (High School Ed.)*, 8(4), 44–49. <http://search.ebscohost.com>

- Mirel, J. (2006). The Traditional High School: Historical Debates Over Its Nature And Function. *Education Next*, 6(1), 14–21. <http://search.ebscohost.com>
- Michigan Department of Education. (2011). *Here is a recommended definition for Alternative Education programs*. Retrieved from Michigan Department of Education: <http://www.michigan.gov>
- Missouri Department of Elementary and Secondary Education (MODESE). (2009a). *Compulsory Attendance Law*. Retrieved from Missouri Department of Elementary and Secondary Education: <http://dese.mo.gov/>
- Missouri Department of Elementary and Secondary Education (MODESE). (2009b). *Missouri Options Program Frequently Asked Questions*. Retrieved from Missouri Department of Elementary and Secondary Education: <http://dese.mo.gov/>
- Missouri Department of Elementary and Secondary Education (MODESE). (2008). *State Policy on Reading Assessment. Reading Improvement Plans: Student Retention and MAP Testing*. Retrieved from Missouri Department of Elementary and Secondary Education: <http://dese.mo.gov/>
- Monrad, M. (2007). *High School Dropout: A Quick Stats Fact Sheet*. Retrieved from National High School Center: [www.betterhighschools.org](http://www.betterhighschools.org)
- Moore, L. A. (2006). *Defining the Term "At-Risk."* Retrieved from Child Trends: <http://www.childtrends.org>
- Munoz, M. A. (2002). *Facing the Challenges of At-Risk Students in Urban School Districts: The Impact of an Attendance and Dropout Prevention Program in a Non-Traditional School*. Retrieved from ERIC database. (ED463364)

National Association of School Psychologists (NASP). (2003). *Student Grade Retention and Social Promotion* (Position Statement). Bethesda, MD: Retrieved from

School Counselor: [www.schoolcounselor.org](http://www.schoolcounselor.org)

National At-Risk Education Network. (n.d.). *The Purpose of "School" and the Definition of "At-Risk": The NAREN Proposal*. Retrieved from The National At- Risk

Education Network: <http://www.atriskeducation.net>

Neild, R. C., Balfanz, R., & Herzog, L. (2007). An Early Warning System. *Educational Leadership*, 65(2), 28–33. <http://search.ebscohost.com>

Nielsen, A., & Gerber, D. (1979). Psychosocial Aspects of Truancy in Early

Adolescence. *Adolescence*, 14(54), 313–326. <http://search.ebscohost.com>

No Child Left Behind Act of 2001, 20 U.S.C.A. § 6301 *et seq.* (West 2003).

Pape, L. (2005, July). High school on the WEB. *American School Board Journal*, 192(7), 12–16. <http://search.ebscohost.com>

Parkway School District. (n.d.). *Missouri Options Program Overview*. Retrieved from

Parkway School District Home Page <http://www.pkwy.k12.mo.us>

Patton, M. Q. (2002). *Designing Qualitative Studies*. Retrieved from Scribd:

<http://www.scribd.com>

Pennsylvania State Education Organization (PSEA). (2010). *Reduce the high school*

*dropout rate*. Retrieved from Pennsylvania State Education Organization Home

Page: [www://psea.org/vision/](http://www://psea.org/vision/)



- Pereles, D. A., Omdal, S., & Baldwin, L. (2009). *Response to Intervention and Twice-Exceptional Learners: A Promising Fit*. Retrieved from ERIC database. (EJ849374)
- Prabhu, M. T. (2008). *Report challenges online learning assumptions*. Retrieved from e School News: <http://www.eschoolnews.com>
- Prensky, M. (2001). Digital Natives, Digital Immigrants. *On The Horizons*, 9(5) 1–4. Retrieved from Marc Prensky: <http://www.marcprensky.com>
- Quinn, N. W., & Quinn, D. W. (2002). *Skill development PLATO Use at Reuther Alternative High School, Kenosha, Wisconsin. Plato Evaluation Series*. Retrieved from ERIC database. (ED469373)
- Ramaswami, R. (2009, May). Even! But No Longer Odd. *T.H.E Journal*, 36(5), 38–44.
- Raver, E. (2006). *History of the GED test*. Retrieved from associated content: <http://www.associatedcontent.com>
- Raywid, M. A. (1994). Alternative Schools: The State of the Art. *Educational Leadership*, 52, 26–31. <http://search.ebscohost.com>
- Raywid, M. A. (1999). History and Issues of Alternative Schools. *The Education Digest*, 64(9), 46–51. <http://search.ebscohost.com>
- Reeves, D. (2008). Improving Student Attendance. *Educational Leadership*, 65(8), 90–91. <http://search.ebscohost.com>
- Renzulli, J. S. & Park, S. (2000). Gifted Dropouts: The Who and Why. *Gifted Child Quarterly*, 44(4), 261–275. Retrieved from Sage journals online: <http://gcq.sagepub.com>

- Rocco, T. S., Bliss, L. A., Gallagher, S., & Perez-Prado, A. (2003). Taking the Next Step: Mixed Methods Research in Organizational Systems. *Informational Technology, Learning and Performance Journal*, 21, 19–29. Retrieved from Organizational Systems Research Association: <http://www.osra.org/>
- Rockwell, S. (2008). Working Smarter, Not Harder: Reaching the Tough to Teach. *Kappan Delta Pi*, Spring, 108–113. <http://search.ebscohost.com>
- Rodriquez, L. F. (2005). Yo, Mister. *Educational Leadership*, 62(7), 78–80. <http://search.ebscohost.com>
- Rohrman, D. (1993). Combating Truancy in Our Schools-A Community Effort. *NASSP Bulletin*, 76(549), 40–45. <http://search.ebscohost.com>
- Romanik, D., & Blazer, C. (1990). *Reasons for Dropping Out of School and Assessment of Risk Factors: A Comparison of Dropouts, "At-Risk" and "Regular" Students*. Retrieved from ERIC database. (ED337512)
- Rothstein, R. (2008). Whose Problem is Poverty? *Educational Leadership*, 65(7), 8–13. <http://search.ebscohost.com>
- Delisio, E.R. (2003, October 02). *Stopping Dropping Out!* Retrieved from Education World: [www.educationworld.com](http://www.educationworld.com)
- Shannon, G.M., Bylsma, P. (2006). *Helping Students Finish School: Why Students Drop Out and How to Help Them Graduate*. Retrieved from Eric database. (ED498351)
- Simon, M. K., & Francis, J. B. (2001). *The Dissertation and Research Cookbook from Soup to Nuts: A Practical Guide to Help You Start and Complete Your*

*Dissertation or Research Project* (3rd ed.). Dubuque, IA: Kendall/Hunt Publishing Company.

Sinclair, M. F. (1994, April). *Are We Pushing Students in Special Education to Drop Out of School?*. Retrieved from ERIC database. (ED370325)

Slaughter, T. (2009). Creating a Successful Academic Climate for Urban Students. *Techniques: Connection Education and Careers*, 83(9), 17–19.  
<http://search.ebscohost.com>

Smink, J. (2001). Alternatives to Retention. *NASSP Bulletin*, 85(629), 3–17.  
<http://search.ebscohost.com>

Smink, J., & Reimer, M. S. (2005). *Fifteen Effective Strategies for Improving Student Attendance and Truancy Prevention*. Retrieved from ERIC database. (ED485683)

Somers, C. L., & Piliawsky, M. (2004). Drop-out Prevention Among Urban African American Adolescents: Program Evaluation and Practical Implications. *Preventing School Failure*, 48(3), 17–22. <http://search.ebscohost.com>

Southeast Comprehensive Center. (2008, June 27). *GED Test and State Assessment Completion for High School Diploma*. Retrieved from Southeast Comprehensive Center: <http://secc.sedl.org>

Sparks E., Johnson, J. L., & Akos, P. (2010, February). Dropouts: Finding the Needles in the Haystack. *Educational Leadership*, 67(5), 46–49.

Spencer, A. M. (2009). School Attendance Patterns, Unmet Educational Needs, and Truancy: A Chronicle Perspective. *Remedial and Special Education*, 30(5), 309–319. <http://search.ebscohost.com>

- Spencer, V. G., Simpson, C. G., & Oatis, T. L. (2009). An Update on the Use of Peer Tutoring and Students with Emotional and Behavioral Disorders. *Exceptionally Education Internationally*, 19(1), 1–13. <http://search.ebscohost.com>
- STATESTATS: Closing the achievement gap? (2006, April). Retrieved from National Conference of State Legislatures: [www.ncsl.org](http://www.ncsl.org)
- Strickland, V. P. (1998, October 2). *Attendance and Grade Point Average: A Study*. Retrieved from Eric database. (ED423224)
- Stillwell, R. (2010, June). *Public School Graduates and Dropouts from the Common Core of Data: School Year 2007–08*, 1-26. Retrieved from National Center for Education Statistics: <http://nces.ed.gov/>
- Stopping the Dropout Exodus*. (2007, May) Retrieved from Time: <http://www.time.com>
- Suh, S., & Suh, J. (2007). Risk Factors and Levels of Risk for High School Dropouts. *Professional School of Counseling*, 10(3), 297–306. <http://search.ebscohost.com>
- Swanson, C. B. (2004, December). *Graduation Rates: Real Kids, Real Numbers*. Retrieved from ERIC database. (ED500824)
- Swanson, C. B., & Chaplin, D. (2003). *Counting High School Graduates when Graduates Count: Measuring Graduation Rates under the High Stakes of NCLB*. Retrieved from Urban Institute: <http://www.urban.org>
- Tallerico, M., & Burstyn, J. N. (2004). *Politics and Paradox! The Case of an Urban Alternative School*. Retrieved from ERIC database. (EJ737608)
- Thattai, D. (2001). *A History of Public Education in the United States*. Retrieved from Democratic Underground: <http://www.democraticunderground.com>

*The Fluencies*. (2011). Retrieved from 21<sup>st</sup> Century Fluency Project:

<http://www.fluency21.com>

Trautman, T., & Lawrence, J. (2004). *Credit recovery: A Technology-Based Intervention for Dropout Prevention at Wichita Falls High School*. Retrieved from American

Education Corporation: <http://www.amered.com>

Trochim, W.M. (2006). *Nonprobability Sampling*. Retrieved from Social Research

Methods: <http://www.socialresearchmethods.net>

Trotter, A. (2008, May 21). *Online Options for 'Credit Recovery' Widen*. Retrieved from

Education Week: <http://www.edweek.org>

Tucker, B. (2009, Summer). Florida's Online Option. *Education Next*, 13–18.

Tyler, J., & Lofstrom, M. (2009). Finishing High School: Alternative Pathways and

Dropout Recovery Report. *Future of Children*, 19(1), 77–103.

<http://search.ebscohost.com>

Urban, H. (2008). *Lessons From the Classroom: 20 Things Good Teachers Do*. Saline,

MI: Great Lessons Press.

Vatterott, C. (2010). 5 Hallmarks of Good Homework. *Educational Leadership*. 68(1)

10–15.

Watson, J., & Gemin, B. (2008). *Using On-Line Learning for At-Risk Students and Credit*

*Recovery*. Retrieved from International Association for k-12 Online Learning:

<http://www.inacol.org/>

- Wertz, M. G., Lamberts, M., & Carpenter, E. (2009). What Special Education Directors Say about RTI. *Learning Disability Quarterly*, 32(4), 245–254.  
<http://search.ebscohost.com>
- Wimmer, M. (2008). Why Kids Refuse to Go to School and What Schools Can Do About It. *Educational Digest*, 74(3), 32–37. [Http://search.ebscohost.com](http://search.ebscohost.com)
- Wolf, M., & Barzilliai, M. (2009). The Importance of Deep Reading. *Educational Leadership*, 66(6), 33–37.
- Wraga, W. G. (1999). *Who wrote the Cardinal Principle Report? The Commission On the Reorganization of Secondary Education Revisited*. Retrieved from ERIC database. (ED454603)
- Zapalska, A., & Brozik, D. (2006). *Learning Styles and Online Education*. Retrieved from ERIC database. (EJ807507)
- Zhang, D., & Law, B. H. (2005). Self Determination as a Dropout Prevention Strategy. *Journal of At-Risk Issue*, 11(2), 25–3. [Http://search.ebscohost.com](http://search.ebscohost.com)
- Z-test for two proportions calculator*. (2005). Retrieved from Dimension Research:  
<http://www.dimensionresearch.com>

Appendix A: Student Perspective Survey of the A+nyWhere Learning System

Student ID Number: \_\_\_\_\_

Please read each of the questions and give your response by checking the blank line next to the number that represents your response.

1. The A+nyWhere Learning System (A+LS) online instruction prepared me for college and/or the workplace.

1\_\_\_\_ 2\_\_\_\_ 3\_\_\_\_ 4\_\_\_\_ 5\_\_\_\_

Completely Somewhat Neutral Somewhat Completely  
Disagree Disagree Agree Agree

2. The A+nyWhere Learning System (A+LS) online instruction was challenging.

1\_\_\_\_ 2\_\_\_\_ 3\_\_\_\_ 4\_\_\_\_ 5\_\_\_\_

Completely Somewhat Neutral Somewhat Completely  
Disagree Disagree Agree Agree

3. The implementation of the A+nyWhere Learning System online instruction increased my effort to earn more credits.

1\_\_\_\_ 2\_\_\_\_ 3\_\_\_\_ 4\_\_\_\_ 5\_\_\_\_

Completely Somewhat Neutral Somewhat Completely  
Disagree Disagree Agree Agree

4. Learning with the A+nyWhere Learning System (A+LS) online instruction was enjoyable.

1\_\_\_\_ 2\_\_\_\_ 3\_\_\_\_ 4\_\_\_\_ 5\_\_\_\_

Completely Somewhat Neutral Somewhat Completely  
Disagree Disagree Agree Agree

5. The implementation of the A+nyWhere Learning System (A+LS) online instruction motivated me to attend school on a more consistent basis than when I was taught by a teacher who utilized direct instruction teaching method?

1\_\_\_\_ 2\_\_\_\_ 3\_\_\_\_ 4\_\_\_\_ 5\_\_\_\_

Completely Somewhat Neutral Somewhat Completely

Disagree Disagree Agree Agree

6. The implementation of the A+nyWhere Learning System (A+LS) online instruction encouraged me to stay in school and work towards my high school diploma.

1\_\_\_\_ 2\_\_\_\_ 3\_\_\_\_ 4\_\_\_\_ 5\_\_\_\_

Completely Somewhat Neutral Somewhat Completely

Disagree Disagree Agree Agree

7. My level of knowledge increased due to the delivery method of the A+nyWhere Learning System (A+LS) online instruction.

1\_\_\_\_ 2\_\_\_\_ 3\_\_\_\_ 4\_\_\_\_ 5\_\_\_\_

Completely Somewhat Neutral Somewhat Completely

Disagree Disagree Agree Agree

8. My learning increased more with the A+nyWhere Learning System (A+LS) online instruction than when I was taught utilizing the direct instruction method.

1\_\_\_\_ 2\_\_\_\_ 3\_\_\_\_ 4\_\_\_\_ 5\_\_\_\_

Completely Somewhat Neutral Somewhat Completely

Disagree Disagree Agree Agree



9. I would recommend the A+nyWhere Learning System (A+LS) online instruction to anyone who is thinking of dropping out of school.

1\_\_\_\_ 2\_\_\_\_ 3\_\_\_\_ 4\_\_\_\_ 5\_\_\_\_

Completely Somewhat Neutral Somewhat Completely

Disagree Disagree Agree Agree

## Appendix B: Student Letter

Dear Students,

Patricia Lee, a graduate student at Lindenwood University, is inviting you to participate in a research study titled *A+nyWhere Learning System (A+LS) Comparative Analysis of Academic Achievement, Attendance and Dropout Rate: Comparing Direct Instruction and Online Learning Using the A+nyWhere Learning System (A+LS) in a Secondary Alternative High School*. Your participation in this study will involve a brief survey; you can also participate in an interview with the researcher if you are accepted as one of the first fifteen volunteers. If you are willing to volunteer to participate in the interview please check the box at the bottom of the page. Patricia Lee will accept the first fifteen students who return their form with the box checked.

The purpose of the study is to examine whether instituting the A+nyWhere Learning System (A+LS) using online instruction for at-risk students in an alternative high school increases student achievement at a higher percentage rate than in an alternative high school that utilizes direct instructional strategy as measured by an increase in earned credits. This study will also determine if the A+nyWhere Learning System (A+LS) using online instruction is a motivational tool for students, and if it increases students' overall attendance, while decreasing the alternative schools' dropout rate. The study will compare data gathered from the 2008-2009 school year, when the students were taught using a direct instruction strategy, to data gathered from the

2009-2010 school year, when the A+nyWhere Learning System (A+LS) using online instruction was implemented for the core academic courses.

There are no risks to you as a participant. The results of this study will be published in Patricia Lee's dissertation. All of the information collected during the study will be held confidentially and will be destroyed five years from the completion date of the dissertation. Lastly, the names of the school, students, and teachers will remain anonymous to ensure confidentiality. Student identification numbers will be utilized instead of names. Student names and student identification numbers will not be utilized in writing the data analysis.

Your participation may benefit others by adding to the literature and existing information on improving alternative education. You will not be penalized in anyway if you chose not to participate. You may also withdraw from this study at any time.

Please check the box if you are willing to participate in the interview session.

If you have any questions about this research project, please contact Patricia Lee either by e-mail at [pmb023@lionmail.lindenwood.edu](mailto:pmb023@lionmail.lindenwood.edu) or at 636-357-0021.

Thank you for your time,

Ms. Patti Lee

Appendix C: Staff Letter

Date

Dear Colleague:

Patricia Lee, a graduate student at Lindenwood University, is inviting you to participate in a research study titled *A+nyWhere Learning System (A+LS) Comparative Analysis of Academic Achievement, Attendance and Dropout Rate: Comparing Direct Instruction and Online Learning Using the A+nyWhere Learning System (A+LS) in a Secondary Alternative High School*.

Your participation in this study will involve a brief interview that will take approximately 45 minutes to complete. The purpose of this study is to examine whether instituting the A+nyWhere Learning System (A+LS), using online instruction, for at-risk students in an alternative high school increases student achievement at a higher percentage rate than in an alternative high school utilizing direct instructional strategy as measured by an increase in earned credits. This study will also determine if the A+nyWhere Learning System (A+LS), using online instruction, was a motivational tool for students and if the program increased students' overall attendance percentage rates or decreased the alternative schools' dropout rate. The study will compare data gathered from the 2008-2009 school year, when students were taught using a direct instruction strategy, to data gathered from the 2009-2010 school year, when the A+nyWhere Learning System (A+LS) using online instruction, was implemented for the core academic courses.

There are no risks to you as a participant. The results of this study will be published in my dissertation. All of the information will be held confidentially and will be destroyed five years from the completion date of the dissertation. Lastly, the names of the school, students, and teachers will remain anonymous to ensure participants' confidentiality. Student and teacher names will not be used during the writing of the dissertation and the findings. Teacher identification numbers will be utilized instead of names while gathering and analyzing data. Teacher names and identification numbers will not be utilized in the writing of the data analysis.

Your participation may benefit others by adding to the literature and current information on improving alternative education. You will not be penalized in anyway if you choose not to participate. You may also withdraw from this study at any time.

If you have any questions about this research project, please contact me either by e-mail at [pmb023@lionmail.lindenwood.edu](mailto:pmb023@lionmail.lindenwood.edu) or at 636-357-0021.

Thank you for your participation,

Sincerely,

Patricia Lee

Appendix D: Student Interview

Student ID number: \_\_\_\_\_ Age: \_\_\_\_\_ Graduation Year: \_\_\_\_\_

Ethnicity: \_\_\_\_\_ Gender: \_\_\_\_\_ Grade: \_\_\_\_\_

1. Why did you come to the alternative high school?
  - a. How long have you been at the alternative high school?
  - b. What is your home school?

IQ1: Has the A+nyWhere Learning System (A+LS) online instruction changed your interaction with your teachers? How?

IQ2: Do you believe the A+nyWhere Learning System (A+LS) online instruction has motivated you to make consistent grade improvement in school so you could pass more classes and earn more credits? If so, how? Why or why not?

IQ3: Do you perceive the A+nyWhere Learning System (A+LS) online instruction easier, harder, or the same level of difficulty as direct instruction? Why or why not?

IQ4: Do you perceive the A+nyWhere Learning System (A+LS) online instruction has increased your motivation to attend school more this year than last year? If yes, how? Why or why not?

IQ5: Do you believe the A+nyWhere Learning System (A+LS) online instruction is preparing you for a transition to work, college, trade school? If yes, how? Why or why not

Appendix E: Teacher Interview

Name: \_\_\_\_\_ Degree(s) and area of concentration \_\_\_\_\_

Gender: \_\_\_\_\_ Years of teaching in this school: \_\_\_\_\_

Grade(s) and subject teaching: \_\_\_\_\_

1. Why did you come to the alternative high school?
  - a. How long have you been at the alternative high school?
  - b. Where did you teach before coming to the alternative high school?
  - c. Why did you choose to come to the alternative high school?

IQ1: Has the A+nyWhere Learning System (A+LS) online instruction changed your interaction with the students? How?

IQ2: Do you believe the A+nyWhere Learning System (A+LS) online instruction has motivated the students to make consistent grade improvement in school so they could pass more classes and earn more credits? If so, how? Why or why not?

IQ3: Do you perceive the A+nyWhere Learning System (A+LS) online instruction easier, harder or the same level of difficulty as direct instruction? Why or why not?

IQ4: Do you perceive the new A+nyWhere Learning System (A+LS) online instruction has motivated the students to attend school more this year than last year? If yes, how? Why or why not?

IQ5: Do you believe the A+nyWhere Learning System (A+LS) online instruction is preparing the students for a transition to work, college, trade school? If yes, how? Why or why not?

IQ6: Was the professional development you received from either the district, school administration or the American Education Corporation in learning the A+nyWhere Learning System effective? If so how?



Appendix F: Parental Informed Consent

Lindenwood University

School of Education

209 S. Kingshighway

St. Charles, Missouri 63301

**Informed Consent for Parents to Sign for Student Participation in Research**

Activities

*A+nyWhere Learning System (A+LS) Comparative Analysis of academic Achievement, Attendance and Dropout rate: Comparing Direct Instruction and Online Learning Using the A+nyWhere Learning System (A+LS) in a Secondary Alternative High School.*

Principal Investigator \_\_\_\_\_Patricia M Lee\_\_\_\_

Telephone: 636-357-0021. E-mail: Pmb023@lionmail.lindenwood.edu

Participant\_\_\_\_\_Parent\_\_\_\_\_

Contact info \_\_\_\_\_

1. Your child is invited to participate in a research study conducted by Patricia Lee and Dr. Lynda Leavitt. The purpose of this study is to examine if instituting the A+nyWhere Learning System (A+LS) online instruction for at-risk students in an alternative high school increases student achievement at a higher percentage rate than in an alternative high school utilizing direct instructional strategy as measured by an increase in earned credits. This study will also determine whether the A+nyWhere Learning System (A+LS) online instruction is a motivational tool

for the students, increasing the students' overall attendance percentage, and decreasing the alternative schools' dropout rate. The study will compare data gathered from the 2008-2009 school year, when the students were taught using a direct instruction strategy to data gathered from the 2009-2010 school year, when the A+nyWhere Learning System (A+LS) online instruction was implemented for the core academic courses.

1. a) Your child's participation will involve
  - Completion of a survey, which will take approximately 15 minutes
  - Participation in a face-to-face interview, which will be audio-taped and should take approximately 45 minutes
  - Forty-five students will be asked to participate in the survey
  - Fifteen students will be asked to volunteer to participate in the interview
2. Your child's participation will take approximately 15 minutes for the survey and 40 minutes for the interview.
3. There are no anticipated risks to your child associated with this research.
4. There are no direct benefits for your child's participation in this study. However, your child's participation will contribute to the knowledge regarding increasing academic achievement levels of students in alternative high schools.
5. Your child's participation is voluntary and you may choose not to let your child participate in this research study or to withdraw your consent for your child's participation at any time. Your child may choose not to answer any questions that

6. he or she does not want to answer. You and your child will NOT be penalized in any way should you choose not to let your child participate or to withdraw your child.
7. We will do everything we can to protect your child’s privacy. As part of this effort, your child’s identity will not be revealed in any publication or presentation that may result from this study and the information collected will remain in the possession of the investigator in a safe location.
8. If you have any questions or concerns regarding this study, or if any problems arise, you may call the Investigator, Patricia Lee at (636) 357-0021, or the faculty advisor, Dr. Lynda Leavitt, (636) 949-4756). You may also ask questions or state concerns regarding your child’s rights as a research participant to the office of research administration at (636) 516-5897.

I have read this consent form and have been given the opportunity to ask questions. I will also be given a copy of this consent form for my records. I consent to my child’s participation in the research described above.

Parent’s/Guardian’s Signature	Date		Parent’s/Guardian’s Printed Name
Child’s Printed Name			
Signature of Investigator or Designee	Date		Investigator/Designee Printed Name

Appendix G: Informed Consent

*Lindenwood University*

School of Education

209 S. Kingshighway

St. Charles, Missouri 63301

**Informed Consent for Participation in Research Activities**

*A+nyWhere Learning System (A+LS) Comparative Analysis of Academic Achievement, Attendance and Dropout Rate: Comparing Direct Instruction and Online Learning Using the A+nyWhere Learning System (A+LS) in a Secondary Alternative High School.*

Principal Investigator \_\_\_\_\_ Patricia M Lee\_\_\_\_\_

Telephone: 636-357-0021 E-mail: Pmb023@lionmail.lindenwood.edu

Participant\_\_\_\_\_Contact info\_\_\_\_\_

---

1. You are invited to participate in a research study conducted by Patricia Lee and Dr. Lynda Leavitt. The purpose of this study is to examine whether instituting the A+nyWhere Learning System (A+LS) online instruction for at-risk students in an alternative high school, increases student achievement at a higher percentage rate, than in an alternative High School utilizing direct instructional strategy as measured by an

increase in earned credits. This study will also determine if the A+nyWhere Learning System (A+LS) online instruction is a motivational tool for students, increases the students' overall attendance percentage, and decreases the alternative schools' dropout rate. The study will compare data gathered from the 2008-2009 school year, when the students were taught using a direct instruction strategy to data gathered from the 2009-2010 school year, when the A+nyWhere Learning System (A+LS) online instruction was implemented for the core academic courses.

2. a) Your participation will involve :
  - Participation in a face-to-face interview which is audio taped
  - Approximately four subjects will be involved in this researchb) Your participation will be required for approximately 40 minutes for the interview.
3. There are no anticipated risks associated with this research.
4. There are no direct benefits for participating in this study. However, your participation will contribute to the knowledge of increasing the academic achievement level of students in an alternative high school high school.
5. Your participation is voluntary and you may choose not to participate in this research study or to withdraw your consent for participation at any time. You may choose not to answer any questions that you do not want

to answer. You will NOT be penalized in anyway should you choose not to participate or to withdraw.

6. We will do everything we can to protect your privacy. As part of this effort, your identity will not be revealed in any publication or presentation that may result from this study and the information collected will remain in the possession of the investigator in a safe location.
7. If you have any questions or concerns regarding this study, or if any problems arise, you may call the investigator, Patricia Lee, (636) 357-0021) or the faculty advisor, Dr. Lynda Leavitt at (636) 949-4756). You may also ask questions or state concerns regarding your rights as a research participant to the office of research administration, at (636) 516-5897.

I have read this consent form and have been given the opportunity to ask questions. I will also be given a copy of this consent form for my records. I consent to my child's participation in the research described above.

Participant's Signature	Date		Participant's Printed Name
Signature of Investigator	Date		Investigator/Designee Printed Name

Appendix H: Permission Letter all4ed.org

From: Jason Amos [jamos@all4ed.org] Sent: Mon 5/10/2010 11:27 AM  
To: Lee, Patricia M.  
Cc:  
Subject: RE: [Contact Us] Dissertation  
Attachments:

Hi Patricia  
We're happy to grant you permission to use our material in the manner that you outlined.  
Best,  
Jason

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

From: info@all4ed.org [<mailto:info@all4ed.org>] On Behalf Of  
patricia.lee@fhdschools.org  
Sent: Friday, May 07, 2010 7:42 PM  
To: Alliance  
Subject: [Contact Us] Dissertation  
Patricia Lee sent a message using the contact form at  
[http://www.all4ed.org/contact/Contact\\_Us](http://www.all4ed.org/contact/Contact_Us).  
Good evening,

I am writing to ask permission to utilize your National Graduation Gap Data in my dissertation. I will ensure your organization is given the proper citation in the dissertation. Please advise if this request is approved.

Thank you,

Patricia Lee

Appendix I: Permission Letter NAEP

From: Osborne, Sherran [Sherran.Osborne@ed.gov] Sent: Fri 5/7/2010 12:49 PM  
To: Lee, Patricia M.  
Cc:  
Subject: RE: NAEP: Other communications concerning NAEP  
Attachments:

Hello and thank you for writing. You may use our data; please cite us as the source.

Sherran Osborne  
Assessment Division

---

From: patricia.lee@fhdschools.org [patricia.lee@fhdschools.org]  
Sent: Monday, May 03, 2010 9:10 PM  
To: Osborne, Sherran  
Subject: NAEP: Other communications concerning NAEP

This email was sent through the NAEP website.

From: patricia.lee@fhdschools.org  
Purpose: Other communications concerning NAEP  
Subject: Data usage in dissertation  
Good evening,  
I am asking permission to utilize your Average NAEP 8th Grade Mathematics Scores in my Dissertation. I would like to use the chart comparing the 1990 to the 2007 demographic scores.



## Vitae

Patricia Mary Lee was born in Clayton, Missouri on January 10, 1965. She attended Ursuline Academy in Kirkwood, Missouri where she graduated in 1983. Upon graduating high school, she attended Southwest Missouri State University in Springfield, Missouri where she graduated with a bachelors of science in education. Upon graduating with her bachelor's degree, Mrs. Lee attended the St. Louis County Police Academy and graduated as the top recruit and top physical fitness award in 1989. While working as a police officer, she attended the University of Missouri St. Louis and earned a Masters Degree in Criminology. In 1995 Mrs. Lee joined the United States Navy Reserves; in 2004 she was named Sailor of the Year for Naval Operations Support Center St. Louis. Mrs. Lee she was commissioned as a naval officer April of 2007. Mrs. Lee continues to serve the United States Navy as a Lieutenant Junior Grade. Mrs. Lee continued working as a police officer until 1997, when she was hired to teach middle school physical education and health. Mrs. Lee worked at the middle school for 10 years. During this time, she earned her Masters of Education in Educational Administration in 2007 from Lindenwood University. While at the middle school, she was named "Teacher of the Year" in 2004.

Mrs. Lee began her administrative career in July of 2008, as the dean of student at the districts alternative high school. In 2009, Mrs. Lee transferred to one of the district's elementary school as administrative intern/assistant principal. Mrs. Lee currently lives in Wentzville, Missouri and is expecting to complete her Ed.D in education administration from Lindenwood University in May of 2011.

