Alternative high schools: what types of programs lead to the greatest level of effectiveness?

Timothy W. Gilson
University of Northern Iowa

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ALTERNATIVE HIGH SCHOOLS: WHAT TYPES OF PROGRAMS LEAD TO THE GREATEST LEVEL OF EFFECTIVENESS?

An Abstract of a Dissertation

Submitted

in Partial Fulfillment

of the Requirements for the Degree

Doctor of Education

Approved:

Dr. Robert Decker, Chair

Dr. Susan J. Koch
Dean of the Graduate College

Timothy W. Gilson

University of Northern Iowa

May 2006
ABSTRACT

Based on the writings and research of Mary Anne Raywid and Gary Wehlage, this study sought to identify characteristics of effective alternative high schools in Iowa. This effectiveness was identified as both student retention and graduate completion.

The researcher-developed survey instrument was distributed to seventy alternative school directors and/or instructors within the state of Iowa. The schools identified were those classified by the Iowa High School Athletic Association as class A through 3A. With sixty-one surveys completed and returned, this study proceeded with an 87% response rate.

The following conclusions were drawn based on the results of this study: (a) teacher lengths of service and administrator lengths of service were not positively related to a student’s graduate completion rate; (b) the size of the school did not have a negative relationship to either graduate completion or student retention, the smaller schools were found to have a negative relationship that was statistically significant when compared to student retention; (c) teacher choice and student choice were not positively related to graduate completion or student retention; (d) alternative schools being autonomous was not positively related to graduate completion or student retention; and (e) the learning community characteristics of discovery learning and simulation were not found to
be positively related to graduate completion. Overall the findings in this study of Iowa’s rural alternative high schools did not support the research hypotheses as discussed in chapter II. However, all programs, regardless of specific characteristics, can be effective when given the right combination of learning attributes. This research does help to lay the groundwork for those traits, as well as for future studies.
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Approved:

Dr. Robert Decker, Chair

Dr. David Else, Committee Member

Dr. Susan Etscheidt, Committee Member

Dr. Charles Johnson, Committee Member

Dr. Bruce Rogers, Committee Member

Timothy W. Gilson

University of Northern Iowa

May 2006
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God Bless
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CHAPTER I
INTRODUCTION

Overview

One in eight students does not complete high school (McMillen, 1997). Minorities, the poor, and the disabled often fare even worse. Over 50 percent of students in a quarter of the nation's poor, urban high schools fail to graduate (Braddock & McPartland, 1993). Suspension, expulsion, retention, chronic failure, and alienation all contribute to unacceptable dropout and incompletion rates. In response to these issues, many states have created alternative schools to address the needs of students at risk for school failure.

Despite the accelerated growth of alternative schools, research and evaluation of alternative school programs and the effect they have on student retention and academic achievement levels is very limited. Many schools do not keep accurate records with regards to attendance, discipline referrals, academic grades, and school completion. Many program successes are reported through collections of anecdotes, with little or no 'hard data' collected, tabulated or analyzed (Montecel, 1999). States, such as Florida, are now beginning to develop evaluation instruments used to assess the impact of local alternative schools and other dropout prevention programs. Typical evaluation instruments consist of six major components dealing with program climate, program resources, curriculum and instruction, transition, program planning and
evaluation, and leadership (Florida Department of Education, 1999). These instruments also employ measurable indicators that provide evidence that standards are being achieved. Additionally, as the number of alternative high schools increase, their fundamental style and design take on many fragmented approaches. Those factors that lead to higher levels of graduation from alternative schools must be identified in order to propose specific guidelines for the formation of those schools.

Successful alternative schools are also marked by strong characteristics of a learning community. Lewis, Schaps, and Watson (1996) describe a caring community of learners as, "a community whose members feel valued, personally connected to one another, and committed to everyone's growth and learning" (p. 16). A learning community is that type of community which also pursues inquiry, has shared leadership, and authentic relationships. To change to a learning community, relationships must develop. Boyer (1995) urges that, "the most essential feature of a good school is the connections, both to the community, in a coherent curriculum, between classes and resources, and between learning and life" (p. 7).

**Statement of the Problem**

The problem of this study is to analyze rural, public alternative high schools in Iowa and make quantitative comparisons on the factors that lead to
successful retention of students and subsequent graduate completion. These factors include teacher years of service, administrator years of service, size, teacher choice, student choice, autonomy, and specific teaching methodologies found in learning communities.

**Definition of Terms**

For consistency of interpretation, the following terms are defined:

**Alternative Education** - A means of incorporating a variety of strategies and choice of environments within the school system to ‘ensure that every young person finds a path to the educational goals of the community’ (Iowa Association of Alternative Education, 2003). Alternative education typically is involved with educating students that have dropped out of school for such reasons as expulsion/behavior problems, failure to attend school, pregnancy issues, etc.

**At-Risk Students** - Students that have been exposed to inadequate or inappropriate educational experiences in the family, school, or community (Pallas, 1989).

**Auxiliary Services** – Those services provided by the traditional high school. i.e. media, guidance, and health services.

**Graduate Completion** – Students that completed the necessary requirements for the attainment of a diploma.
Rural Schools - For purposes of this study; those schools classified by the Iowa High School Athletic Association (IHSAA) as varying from class A through class 3A.

Student Choice – The proportion of students who voluntarily chose to attend an alternative school.

Student Retention – Students that remained in the alternative school for one full year or more.

Student with Disabilities - Students covered under the Individuals with Disabilities Education Act (IDEA). These students have been identified from their traditional high schools and continue to be served through an Individual Education Plan (IEP).

Teacher Choice – The proportion of teachers who voluntarily chose to teach in an alternative school setting.

Limitations of Design of Study

This purposive sample may limit the findings for interpretations outside of the state of Iowa and for large, urban schools. While these schools have been in existence much longer, this study is interested in findings from those schools with close ties to the school from which the students transfer. This is not common among large, urban schools. Also, many of the schools that were sent questionnaires have only been in existence for a short period of time. This will limit their graduate completion and student retention data. This research study is
also based on voluntary participation from alternative school coordinators. Those who chose to respond share common characteristics that are not typical of other alternative school coordinators. Due to this, bias related to the sample must be considered. Bias can also occur from a self-administered questionnaire. It must be assumed that participants in this study will be willing to accurately assess and then truthfully report on their specific program.

**Conceptual Framework**

The growth of alternative schools can be traced to several factors. The advent of the U. S. Department of Education's Report *A Nation at Risk* (Holland, 2002) created a perception that America's public schools are failing to meet the educational needs of students. With our nation's schools losing approximately $77 billion dollars annually because of school dropouts, public schools have had to "step to the plate" to find alternative methods to keep otherwise at-risk students in school. This historical fact has led to the formation of alternative high schools.

During the 2000-01 school year, 39% of public school districts in the United States administered at least one alternative school or program for at-risk students. This percentage amounts to 10,900 public alternative schools and programs during this year. During this year alone, 612,900 students were enrolled in public alternative schools or programs. This accounts for 1.3% of all public school students in the United States. This boom in alternative education
stems from a variety of reasons. The vast majority of school districts transfer their at-risk students for reasons such as: possession, distribution, or use of drugs; physical attacks; chronic truancy; continual academic failure; possession or use of a weapon other than a firearm; disruptive verbal behavior; possession or use of a firearm; and, pregnancy/parenthood or mental health needs (National Center for Education Statistics, 2002).

Generally, alternative education comes from a recognition that all people can be educated. It is in the general interest of society that educational opportunities are provided to enable each individual to find a learning environment in which they can participate. Only through this participation can individuals receive the general education that prepares them for inclusion into the community.

There is also evidence that when adopted as a model, alternative schools can transform school districts (Raywid, 1994). Many different reasons can be cited for these "transformations"; but there are several specific factors that mark all successful alternative programs. First, successful alternative programs are small and were designed by those who were going to operate them. They continually maintain a small teacher to student ratio. Second, they took their character, theme, or emphasis from the strengths and interests of the teachers who conceived them. These first two factors lead to the category of size. Third, their teachers all chose the program, with subsequent teachers selected with the
input of present staff. The strength of the teaching staff lies in the fact that the teachers chose to work in this type of setting. Fourth, their students and families chose the program that was administered by a specific teacher-director. Factors three and four lead to the category of choice. Fifth, their small size denied them much auxiliary or specialized staff, such as librarians, counselors, or deans. Students in these programs work directly with their classroom teachers for all of their critical needs. Sixth, the superintendent of the school district sustained the autonomy and protects the integrity of the school and program. Top administration support the programs and allow them the flexibility to work outside of district bureaucracy. Seventh, all of the programs were relatively free from district interference and the administration also buffered them from demands of central school officials. These preceding three factors of auxiliary services, administrator autonomy, and the buffering of traditional district bureaucracy lend themselves to a category specifically dealing with autonomy. Finally, the continuity of leadership has been considerable.

Wehlage, Rutter, Smith, Lesko, and Fernandez (1989) believed that two specific factors lead to the success of alternative high schools. First, these schools generate and sustain community within them. Second, they make learning engaging. Raywid (1994) added a third component that alternative schools provide the organization and structure needed to sustain the first two.
Aronson (1995) also identified from a number of studies the various characteristics of successful alternative education programs. The most easily recognizable aspects that these programs included were such features as their culture or climate, organizational structure, curriculum and instruction, and their links to other programs and services. The creative design of programs to meet the specific needs of students and community necessitates that the way programs look may vary, but these general features exist across the range of successful programs.

Extensive emphasis and energy go into making curriculum compelling, challenging, and inviting. Alternative schools emphasize experience-focused learning and attempt to combine academics with work-related fundamentals (Raywid, 1994). Successful programs give teachers flexibility in designing strategies and methods that will work with their students. Specific strategies include individual learning, cooperative learning, competency based learning, team teaching, peer tutoring, teaching to multiple intelligences, and an absence of tracking. Curriculum usually varies from a focus on basic skills to a focus on personal development and behavior.

Even though evaluation of alternative school programs is somewhat limited, it is vital that local districts take on this endeavor. Evaluating programs is necessary to achieve at least two important goals. First, alternative schools
should be held to strict accountability measures. This accountability can help boost the traditional school’s faculty and public confidence in these programs. Second, evaluation will inform future decision making and funding mechanisms.

Alternative schools and programs have had a long history filled with many changes, adaptations, and continuous modifications. Educational theorists and researchers have continually published materials and other forms of data to support the strengths of these types of programs. This vast history has led to huge cultural, economical, and financial changes for public school districts. In an attempt to provide a positive atmosphere conducive to learning for all, local school districts have, by the thousands, adopted these alternative philosophies and programs. As federal and state mandates require schools to increase their accountability towards educating all students, alternative forms of education will undoubtedly continue to expand and build upon past findings.

Alternative schools have had success with many students, in part because they have the ability to take on many characteristics of learning communities. Teaching methods traditionally utilized in learning communities involve the use of inquiry, simulations, and discovery learning. In the use of inquiry, students are directly involved in determining or developing their own curriculum. This method, when utilized with reading curriculum, has just recently been recognized as a valid way of bringing enjoyment back into reading for many children. Simulations contribute to students working together as a community of learners.
Students become actively involved in simulations by assuming roles, using their critical thinking skills to make important decisions and problem solving. Discovery learning usually results in a more authentic and memorable learning experience for the students. Discovery learning is defined by Joseph Abruscato (1996) as "the learning that occurs when children, with our guidance, increase their cognitive, psychomotor, and affective development through direct experience" (p. 38). Students share information on how to solve problems and often work together to achieve goals in cooperative settings.

All of these various learning methods contribute to the creation of a learning community because they create authentic learning experiences. These methods allow students to come to know each other and to learn to value what each has to offer. They also focus on problem solving and inquiry and require teachers and students to share responsibility and control. Sergiovanni (1993) believes that schools need to first become a community before they can become a learning community. "After community is established, a school can become a purposeful community which is described as a place where members have community of mind binding them to shared ideology" (Sergiovanni, 1993, p. 72).

The literature on professional learning communities repeatedly gives attention to five attributes of such organizational arrangements. These attributes are: supportive and shared leadership, collective creativity, shared values and vision, supportive conditions, and shared personal practice. Louis and Kruse
(1995) identify the supportive leadership of principals as one of the necessary human resources for restructuring staff into school-based professional communities. The learning community is also reinforced by people, at all levels, collaboratively and continually working together. Staff are encouraged not only to be involved in the process of developing a shared vision but to use that vision as a guidepost in making decisions about teaching and learning in the school (Isaacson & Bamburg, 1992). Boyd (1992) and Louis and Kruse (1995) reported that in order for learning communities to function productively, the physical or structural conditions and the human qualities and capacities of the people involved must be optimal. For students, these factors identified lead to decreased dropout rates, lower rates of absenteeism, increased learning, greater academic gains than those found in traditional schools, and smaller achievement gaps between students from different backgrounds.

Learning communities are also characterized by distributed control (Wilson & Ryder, 1998). Learning goals, as well as a shared understanding, are all agreed upon by the group as a whole. Those involved in the community are committed to the generation and sharing of new knowledge. Those with greater expertise play critical roles in helping and modeling, yet they are expected to learn, solve problems, find answers, right along with the rest of the group. Alternative schools exhibiting learning community characteristics allow their students flexibility and negotiated learning activities. There are high levels of
dialogue, interaction, and collaboration. These characteristics yield creativity, innovation, and the appreciation of diversity (Wilson & Ryder, 1998).

Sergiovanni (1993) suggests that the current problem with schools has to do with the loss of a sense of community. Lewis (1996) stated, “to get kids to care about learning, they must care about each other and be motivated by important challenging work” (p. 16). There are positive student outcomes in caring learning community classrooms. Given all the support for the advantages of a learning community environment for schooling, there is good reason to continue to pursue the goal of creating learning communities in schools.

**Significance of the Study**

In order to better understand what makes alternative high schools in Iowa effective, it is the purpose of this study to examine characteristics comprising rural alternative high schools in Iowa and to make quantitative comparisons on the types of programs that each contains. These comparisons should lead to an analysis of common characteristics that promote high completion and graduation rates. These common characteristics should help guide local districts, with assistance from the Department of Education, in making more informed decisions on their current, or new, alternative school programming.

**Research Questions**

The following research questions guided the collection and analysis of data:
1. What is the relationship, if any, between both teacher years of service and administrator years of service, and graduate completion?

2. What impact, if any, does the size of the school have on student retention and graduate completion?

3. What does the relationship between teacher choice and student choice have on student retention and graduate completion?

4. What impact, if any, does the autonomy of the program have on student retention and graduate completion?

5. What impact, if any, does the use of learning community teaching methodologies (i.e. discovery learning and simulations) have on graduate completion?

Research Hypotheses

The following research hypotheses guided the interpretation and analysis of the test results:

1. There is a positive relationship between administrator years of service and graduate completion.

2. There is a positive relationship between teacher years of service and graduate completion.

3. There is a negative relationship between the size of the school and student retention.

4. There is a negative relationship between the size of the school and
5. There is a positive relationship between teacher choice and student retention.

6. There is a positive relationship between teacher choice and graduate completion.

7. There is a positive relationship between student choice and student retention.

8. There is a positive relationship between student choice and graduate completion.

9. There is a positive relationship between the autonomy that exists and student retention.

10. There is a positive relationship between the autonomy that exists and graduate completion.

11. There is a positive relationship between the use of discovery learning and graduate completion.

12. There is a positive relationship between the use of simulations and graduate completion.

Organization of the Study

Chapter I of this dissertation was comprised of a statement of problem as well as the conceptual framework I will use to explore this problem. Chapter II consisted of a review of literature exploring the history, evolution, and
development of alternative high schools. This chapter also explored the concept of learning communities and their role in the education of alternative school students. Chapter III of this dissertation was involved with the methodology of the data. It discussed both the quantitative research design as well as the sample participants and subsequent population from which they were chosen. Chapter IV consisted of the data analysis. Specific subprograms of the Statistical Program for the Social Sciences (SPSS), Version 11.5 for Windows were used to examine similarities and differences between sample schools. This data analysis related back to initial research questions and helped to answer those questions in quantitative form. Chapter V summarized the research with both conclusions and implications for future research.
CHAPTER II
REVIEW OF LITERATURE

Hefner-Packer (1991) categorizes five types of alternative schools operating today:

1. The Alternative Classroom, designed as a self-contained classroom within a traditional school, simply offering varied programs in a different environment;

2. The School-Within-a-School, housed within a traditional school, but having semi-autonomous or specialized educational programs;

3. The Separate Alternative School, separated from the regular school and having different academic and social adjustment programs;

4. The Continuation School, developed for students no longer attending traditional schools, such as street academies for job-related training or parenting centers; and

5. The Magnet School, a self-contained program offering an intensified curriculum in one or more subject areas such as math or science.

Yet another definition of alternative education refers to all educational programs that fall outside the traditional K-12 school system, including home schooling and special programs for gifted children. Increasingly, the term has also been applied to disciplinary programs to which troubled youth are transferred when they are suspended or expelled from the mainstream school.
system, as well as remediation programs in which students prepare to retake failed courses. Morley (1991) draws on a number of writers to define alternative education as a perspective, not a procedure or program. Based upon a belief that there are many ways to become educated, as well as many types of environments and structures within which this may occur.

For years, many in education have operated under the flawed assumption that large schools are cost-effective. We have reasoned that, by placing a lot of students and teachers together, we could offer more programs and classes. Unfortunately, economies of scale do not always pay the dividends expected.

Increasingly, we have felt the need to create many smaller structures or groupings within a large school to give students a chance to feel that they have a “place” (DeBlois, 2000). By their very nature, alternative schools are generally small schools, often with fewer than 200 students. Alternative schools generally portray a sense of community and personal caring. Small schools are places where students get more attention, perform better, and are happier (DeBlois, 2000).

Amid all the current talk of school restructuring, alternatives are the clearest example we have of what a restructured school might look like. Moreover, many of the reforms currently pursued in traditional schools—downsizing the high school, pursuing a focus or theme, student and teacher choice, making the school a community, empowering staff, active learner
engagement, authentic assessment-are practices that alternative schools pioneered (Raywid, 1994).

The word paradigm has been overused in recent years and thus has lost some of its explanatory power. Nonetheless, it is still precisely the right word to describe the transformation we need in American schooling (Marshak, 1998). Educators need to acknowledge that whatever its merits in 1910 or even 1960, the industrial paradigm of school is a disaster for many of our children today. Age grading is based on an erroneous understanding of human development. Giving a child a brand new teacher every year is enormously wasteful of the relationship that has grown between teacher and student and of the teacher’s knowledge of the child’s capacities and needs. Giving an adolescent five or six teachers who know almost nothing about her/him as a person is disrespectful and unproductive. Putting a thousand or two thousand teens into the same school disconnects the majority of teens from any adults and leads to alienation and boredom and conflict. Alternative schools pave the way to eliminate these types of educational inadequacies.

A number of years ago futurists Toffler (1970; 1980) and Naisbitt (1982) predicted the break up of the standardized, bureaucratized, factory model school system. They indicated that if the changes did not come from within the school systems, they would surely come from outside of them. These outside pressures
have increased over the years to the point that alternative high schools have played an ever increasing role in public education.

The advent of the U. S. Department of Education's Report *A Nation at Risk* (Holland, 2002) created a perception that America's public schools are failing to meet the educational needs of students. With our nation's schools losing approximately $77 billion annually because of school dropouts, public schools have had to "step to the plate" to find alternative methods to keep otherwise at-risk students in school. This historical fact has led to the formation of alternative high schools.

As early as colonial America, education was conducted by the wealthy or offered to the general population by religious groups. Koetke (1999) discussed the two basic systems in place today. These systems, or educational opportunities, consist of those "outside the system" and those "inside the system." The elite and costly private schools, those with a religious orientation, and the recently revived home schools fall into the category of those outside the system. Those inside the system serve a special population of students with unique learning disabilities, teenage parent, potential dropouts, violent individuals, or court-adjudicated youths. The majority of our discussion through this paper will be comprised of those students classified as "inside the system."

Although schools in the 1950's and 1960's may very well have had alternative schools, these schools were mostly designed to serve students who
had already dropped out of the regular school. However, as district budgets began to shrink in the 1970’s, the majority of these types of schools were discontinued because they were felt to have little impact on decreasing the dropout rates. Within the last decade the “new” type of alternative school has resurged and has truly emphasized the dropout prevention aspect. Most alternative schools now pay special attention to the student’s individual social needs and the academic requirements for a high school diploma.

An especially strong movement to develop alternative programs and schools occurred in the USA throughout the 1960’s and 1970’s in response to civil rights’ issues and the emphasis on values and individualization in education (Young, 1990). In the 1980’s and through the 1990’s, the global focus on the completion of full secondary school, and reduction in drop out rates, led to the further development of alternative schools as a potential solution to educational problems. As the 1990’s progressed and various models of alternative schools developed, a further event acted as a catalyst to the establishment of alternative schools in the USA. In April of 1999, two students from Columbine High School in Colorado terrorized, shot, and bombed students and teachers at the school before shooting themselves. The event provoked a national outrage, and following a number of other incidents of school violence and threats involving weapons from around the country, it provided a catalyst for many school districts to toughen their response to problems of disruption at school. Policies were
formulated and passed by school boards outlining zero tolerance, three strike suspension policies, and mandatory expulsion for threats and violence to protect the safety of students and staff in schools. As a result, students requiring alternative education arrangements were identified in increasing numbers and models of alternative education were again brought out for consideration as school districts again tackled the issues of educating students labeled as a threat to the safety and functioning of schools.

Yet another strong factor in the formation of alternative schools was the monumental research indicating that large high schools were less then successful for students. Between 1940 and 1990, the total number of elementary and secondary public schools declined 69% - from approximately 200,000 to 62,0037 - despite a 70% increase in the U. S. population (Walberg, 1992). Consequently, the average school enrollment rose more than five times - from 127 to 653. In today’s urban and suburban settings, high school enrollments of 2,000 and 3,000 are commonplace, and New York City has many schools with enrollments nearing 5,000 (Raywid, 1994). According to the National Governors Association, graduation rates from traditional high schools have actually decreased over the past 10 years, while the rate of individuals obtaining alternative academic credentials have more than doubled (Johnson, 2002).

Based on 30 years of research, Mary Anne Raywid (1990) has identified the characteristics of three general school types, as defined by purpose. Type I
schools offer full time, multiyear, education options for students of all kinds, including those needing more individualization, those seeking an innovative or challenging curriculum, or dropouts wishing to earn their diplomas. A full instructional program offers students the credits needed for graduation. Even though their purpose is educational rather than disciplinary, Type I schools have proved to be successful for at-risk students, including those with behavior problems. Their individualized approach helps students succeed academically; their small size and family atmosphere keep students connected and in school; and their voluntary enrollment policies boost student motivation and goal setting. Most of the research showing positive effects for alternative schools applies to Type I schools (Raywid, 1994). Discipline is the distinguishing characteristic of Type II programs, which aim to segregate, contain, and reform disruptive students. Students typically do not choose to attend, but are sent to the school for specified time periods or until behavior requirements are met. Oklahoma studied data on the state’s alternative students--credits earned, classes failed, grade point averages, absences, standardized test scores, and disciplinary referrals--and found that students in alternative education programs improved substantially, while students in disciplinary programs such as in-school suspension declined (Oklahoma Technical Assistance Center, 1994-95). Type III programs provide short-term but therapeutic settings for students with social and emotional problems that create academic and behavioral barriers to learning.
These schools may temporarily improve student behavior and achievement, but results tend to fade when students return to home schools (Glass, 1994).

Alternative schools were formed for many reasons; however, two main goals have evolved from many researchers and educators. Those goals are the desire to increase graduation rates and the need to eliminate disruptive or violent students from classrooms without sending them into the streets. Boss (1998) comments that according to the public agenda, 88% of teachers nationwide believe academic achievement would improve substantially if persistent troublemakers were simply removed from class. Surveys, interviews and discussions about school problems with teachers in any public secondary school have invariably placed the issue of disruptive students as a high priority of concern. Proponents of alternative education claim that it dramatically improves the academic achievement and behavior of dropouts and potential dropouts. Students in alternative schools report higher levels of both satisfaction with their school and confidence that the school will meet their needs than do students in traditional schools. The effects of alternative education also seem to extend beyond the school years. A 1990 survey of dropouts who had returned to school and graduated from an alternative education program in Iowa suggests that alternative school graduates do tend to become productive citizens after graduation (Morley, 1991).
Throughout this twenty to thirty year process in the development of alternative programs for disruptive students, the characteristics of the students referred to these programs has changed dramatically. Initially, in the 1960's the resurgence in alternative education introduced unmotivated students engaged in the process of education into an alternative learning environment where motivation could be rekindled and their education goals fulfilled. More recently, students are unmotivated and disengaged from the learning process. This marked change in the attitude of students to formalized education has created the need for alternative programs to further develop their strategies and programs to incorporate the need to re-engage these students.

One crucial aspect of the success of alternative education is the length of the program. Programs that assume the problem resides within the student often attempt to change students to enable them to succeed in traditional settings. These programs work with students only on a short-term basis. If they are then forced to return to their traditional school, they often undergo the same problems they had earlier in their education. They feel a loss of support and often face potential labeling and stigmatization by both peers and teachers. These students may then regress back to prior behaviors and performance levels. Whether students should remain in an alternative program for a long period of time or will benefit from a short intervention and early return to the base school is likely dependent upon the type and severity of the problems they faced. One thing is
certain, those programs that are designed to work with students through graduation have a much higher success rate.

The small teacher-pupil ratios and additional services of alternative schools can cost more per pupil than regular schools (Black, 1997). An Iowa study found that investing in education alternatives yielded long-term savings to the state in welfare, unemployment, and incarceration expenses; however, since the number and percentage of at-risk students are predicted to rise with increases in poverty, non-English speaking immigrants, and minority populations, a system's focus could be more effective than one that targets individuals. The American Federation of Teachers has estimated that for the additional dollars spent on each disruptive student attending an alternative school, the public annually gains $14,000 in student learning time that would have been lost, $2,800 in reduced grade repetition costs, $1,750 in reduced welfare costs, and $1,500 in reduced prison costs. This is a total savings of $18,000 per student (Johnson, 2002). High quality alternative programs are not only cost effective, but also perform a valuable function for youth and the community by encouraging positive behavior. Through alternative programs, formerly disconnected youth are given the opportunity to gain educational and employment-related credentials as well as to connect to their community in a positive way (Johnson, 2002).

Another type of school with a small teacher-pupil ratio is referred to as personalized schools. These schools are often referred to as communities where
students, parents, and teachers know each other personally and they work together to help young people to learn and succeed. In personalized schools, young people are cared for, nurtured, and supported. In these types of schools, at-risk students are much more likely to become involved, to make an effort, and to achieve. As a result such schools manage to reduce the negative effects of race and poverty on school success (Raywid, 1994). Small schools also tend to narrow the achievement gap between advantaged and disadvantaged youngsters by raising the achievement gap of the latter group. Not only do students in small, alternative settings have higher attendance rates than students in larger schools, but students who change from large to small schools generally exhibit improvement in attendance. The drop out rates of alternative type schools are much lower than their larger school counterparts, and students attending these schools have lower rates of negative social behavior, including classroom disruptions, vandalism, fights, theft, substance abuse, and gang membership. Marshak (1998) believes that many of these positive attributes are due to the fact that children and teens who attend personalized schools feel a sense of belonging to the school community and feel more positive about school and themselves. Data also confirms that parents are much more involved when their child or teen attends a personalized school, and they have greater confidence in the school.
Altogether, three sets of factors appear to account for the success of alternative schools. First, these schools generate and sustain community within them. Second, they make learning engaging, and third, they provide the school organization and structure needed to sustain the first two. Aronson (1995) also identified from a number of studies the various characteristics of successful alternative education programs. The most easily recognizable aspects that these programs included were such features as their culture or climate, organizational structure, curriculum and instruction, and their links to other programs and services. The creative design of programs to meet the specific needs of students and community necessitates that the way programs look may vary, but these general features exist across the range of successful programs.

Extensive emphasis and energy go into making curriculum compelling, challenging, and inviting. An example of this can be found in research conducted by Houston (2003) which indicates that pregnant teens typically find more success in alternative schools because these type of schools have the ability to tailor their education towards courses such as independent living skills, food nutrition, and personal development. Alternative schools also provide a higher degree of support services such as daycare and transportation.

When alternative schools are evaluated on the success of their ethnic minority and low socioeconomic students, their effects on achievement are the most positive of all. Researchers have found that large schools have a more
negative impact on minority and low socio-economic status (SES) students than on students in general. As with achievement, the research also indicates that the attitudes of low-SES and minority students are especially sensitive to school size and benefit greatly from attending small, alternative-type schools. Generally speaking, alternative schools which are much smaller than the traditional high school help staff and students gain a stronger sense of personal efficacy. The learning needs of students, not the organizational needs of the school, drive school operations (Berlin & Cienkus, 1989).

Alternative education is predicated on the idea that the existing educational system serves most students effectively, so only the few who are not succeeding need alternative learning environments. Thus, alternative education assumes minimal failure in traditional schools. However, some school data suggest a more extensive failure rate. Research from Little Rock, Arkansas revealed that in 1989-1991 more than two-thirds of the students enrolled in junior and senior high schools in this urban area showed indications of academic difficulty, including course failure, grade retention, dropout, suspension, expulsion, and low standardized test scores (New Futures for Little Rock Youth, 1993). Clearly, all of these students cannot be placed in alternative environments, and placing only some is only a partial solution. Many more students who are at-risk remain in traditional classrooms where they are most likely under served. The removal of the most disruptive students may give
practitioners false confidence in the effectiveness of the existing educational program for the remaining student population. One particular group that teachers may overlook are the quiet, underachieving students. Also, removing students from existing schools and classrooms may have a negative financial impact on these traditional programs. Unless districts receive sufficient additional funds, establishing separate alternative schools or programs draws money away from existing programs. Traditional schools then must function on a decreased budget. This reduced budget is especially detrimental if these schools must still serve many students at-risk of failure who are not placed in alternative education. If this happens, fewer resources remain in traditional schools for innovative or special services to meet these students’ needs. If the traditional system fails many more students than those targeted for alternative settings, and if creating a separate alternative education system negatively affects the rest of the system, then policymakers may need to reconsider the impact of an alternative school strategy. The system might then better serve all students by addressing the root causes of student learning problems and creating more flexible teaching and learning environments within regular classrooms and schools. Such changes may reduce negative outcomes, allowing more students to succeed within regular schools.

Comparisons between alternative education and mainstream education are difficult to make due to the differing philosophies underlying each approach
and the diversity of students involved in each learning environment. Many of the students in alternative education are the ‘failures’ of the mainstream system and the factors influencing this failure are often beyond the school. Therefore, much of the work on alternative schools explores their organizational arrangements and process - providing a blueprint for others to follow and an understanding of the approach used, rather than describing the outcomes for students (Raywid, 1994).

Alternative schools give students additional educational opportunities, keep students learning who might otherwise drop out, and remove disruptive students from regular classrooms. Common, successful components of an alternative education include smaller classes, flexible class schedules, community college partnerships, and childcare. These invaluable approaches to education are common barriers to the success of modern day at-risk students. Research shows that alternative high school students are more likely to graduate and go on to higher education. This fact alone has a huge impact on federal and state funding that schools might have otherwise lost due to students dropping out.

Even districts that are pleased to have one or two alternative schools remain cool to the prospect of multiplying them or converting the district entirely. This is in part because alternative schools have an image problem-arising partly from the conflating of three quite different types into a single inaccurate
composite, and partly from the "school for losers" bias likely to persist as long as there remains a single standardized program, plus one or two others to accommodate "deviant" (Boyan, 1988). As this suggests, alternative schools pose some fundamental challenges in the way we organize and coordinate education. These approaches to organization and coordination have sought reform through tightening and intensifying bureaucracy, while alternative schools pose an organizational alternative to bureaucracy.

Clearly, what alternative schools provide in the form of small classes, schools as communities, individualized attention and instruction, and many other features, would benefit all students, not just those at risk of dropping out. Perhaps districts should place a more focused effort on restructuring traditional schools that could make alternative environments an accepted part of the system for everyone. The best features of alternative schools could be incorporated into regular schools. While establishing separate alternative schools for some students incurs high costs, incorporating features such as parent programs, summer school, and mentoring programs, and providing access to health and social services in the regular schools, may be more cost effective (Jordan & Jordan, 1995) and could help alleviate many of the problems faced by students in at-risk situations.

In general, research and evaluation of alternative school programs and the effect they have on student retention and academic achievement levels is very
limited. Many schools do not keep accurate records with regards to attendance, discipline referrals, academic grades, and school completion. Many program successes are reported through collections of anecdotes, with little or no ‘hard data’ collected, tabulated or analyzed (Montecel, 1999). States, such as Florida, are now beginning to develop evaluation instruments used to assess the impact of local alternative schools and other dropout prevention programs. Typical evaluation instruments consist of six major components dealing with program climate, program resources, curriculum and instruction, transition, program planning and evaluation, and leadership. These instruments also employ measurable indicators that provide evidence that standards are being achieved.

Alternative schools and programs have had a long history filled with many changes, adaptations, and continuous modifications. Educational theorists and researchers have continually published materials and other forms of data to support the strengths of these types of programs. This vast history has led to huge cultural, economical, and financial changes for public school districts. In an attempt to provide a positive atmosphere conducive to learning for all, local school districts have, by the thousands, adopted these alternative philosophies and programs. As federal and state mandates require schools to increase their accountability towards educating all students, alternative forms of education will undoubtedly continue to expand and build upon past findings.
The research on learning communities has grown exponentially over the years, and with that research has come a great deal of information in relation to how these learning communities can improve alternative education. In her synthesis of this research, Mary Ann Raywid (1994) notes that small learning communities often employ unconventional organizational structures that help promote the sense of belonging. She goes on to emphasize that the bonds that are created in small schools are likely to have a positive influence on students long after they leave high school.

Learning communities are generally defined as a purposeful restructuring of curriculum to link together courses or coursework so that students find greater coherence in what they are learning and greater interaction with faculty and peers.

Teaching methods traditionally utilized in learning communities involve the use of inquiry, simulations, and discovery learning. In the use of inquiry, students are directly involved in determining or developing their own curriculum. This method, when utilized with reading curriculum, has just recently been recognized as a valid way of bringing enjoyment back into reading for many children. Simulations contribute to students working together as a community of learners. Students become actively involved in simulations by assuming roles, using their critical thinking skills to make important decisions and problem solving. Discovery
learning usually results in a more authentic and memorable learning experience for the students. Discovery learning is defined by Joseph Abruscato (1996) as "the learning that occurs when children, with our guidance, increase their cognitive, psychomotor, and affective development through direct experience" (p. 38). Students share information on how to solve problems and often work together to achieve goals in cooperative settings.

All of these various learning methods contribute to the creation of a learning community because they create authentic learning experiences. These methods allow students to come to know each other and to learn to value what each has to offer. They also focus on problem solving and inquiry and require teachers and students to share responsibility and control. Sergiovanni (1993) believes that schools need to first become a community before they can become a learning community. "After community is established, a school can become a purposeful community which is described as a place where members have community of mind binding them to shared ideology" (Sergiovanni, 1993, p. 72).

The literature on professional learning communities repeatedly gives attention to five attributes of such organizational arrangements. These attributes are: supportive and shared leadership, collective creativity, shared values and vision, supportive conditions, and shared personal practice. Louis and Kruse (1995) identify the supportive leadership of principals as one of the necessary human resources for restructuring staff into school-based professional
communities. The learning community is also reinforced by people, at all levels, collaboratively and continually working together. Staff are encouraged not only to be involved in the process of developing a shared vision but to use that vision as a guidepost in making decisions about teaching and learning in the school (Isaacson & Bamburg, 1992). Boyd (1992) and Louis and Kruse (1995) reported that in order for learning communities to function productively, the physical or structural conditions and the human qualities and capacities of the people involved must be optimal. For students, these factors identified lead to decreased dropout rates, lower rates of absenteeism, increased learning, greater academic gains than those found in traditional schools, and smaller achievement gaps between students from different backgrounds.

Learning communities are also characterized by distributed control (Ryder & Wilson, 1998). Learning goals, as well as a shared understanding, are all agreed upon by the group as a whole. Those involved in the community are committed to the generation and sharing of new knowledge. Those with greater expertise play critical roles in helping and modeling, yet they are expected to learn, solve problems, find answers, right along with the rest of the group. Alternative schools exhibiting learning community characteristics allow their students flexibility and negotiated learning activities. There are high levels of dialogue, interaction, and collaboration. These characteristics yield creativity, innovation, and the appreciation of diversity (Ryder & Wilson, 1998).
In learning communities, the traditional pattern that “teachers teach, students learn, and administrators manage is completely altered. There is no longer a hierarchy of who knows more than someone else, but rather the need for everyone to contribute” (Kleine-Kracht, 1993, p. 393). The main characteristic of learning communities is a focus on student learning. This focus is maintained by continually providing two specific conditions necessary for productivity. Boyd (1992) and Louis and Kruse (1995) maintain these two conditions as: the physical or structural setup and the human qualities/capacities of the people involved. Louis and Kruse (1995) further identified time to meet and talk, small size of the school, physical proximity of the staff to one another, teaching roles that are interdependent, communication structures, school autonomy, and teacher empowerment as physical factors that support learning communities. Additional factors include the staff’s ability to select teachers and administrators for the school. The human qualities/capacities include: respect and trust among colleagues at the school and district level, possession of an appropriate cognitive and skill base that enables effective teaching and learning, supportive leadership from administrators and others in key roles, and relatively intensive socialization processes (Louis & Kruse, 1995).

The results from learning community reports have some direct correlations with similar findings indicated earlier in this chapter from the writings of Mary
Anne Raywid and alternative education. Both seem to indicate that teachers exhibit higher levels of job satisfaction and morale, and lower rates of absenteeism. Another factor that creates a very positive learning atmosphere in both alternative schools and successful learning communities is the teacher's ability to make adaptations for students more quickly than in traditional schools. For students, this positive learning atmosphere results in a decreased dropout rate, lower rates of absenteeism, an increased learning that is distributed more equitably than in smaller high schools, larger academic gains in math, science and reading, and smaller achievement gaps between students from diverse backgrounds (Southwest Educational Development Laboratory [SEDL], 1997).

While the research on learning communities in both alternative education and traditional forms of education is all positive, the structure and guidance for initiating these communities is lacking. As Calhoun (1994) stated, "the loss of a million students a year makes us intolerant of the status quo" (p. 3). A bright spot does exist in the future. The concept of learning communities is being designed and implemented in various teacher and administrator preparation programs in higher education (Avila, Van Tassell, Dixon, & Tipps, 1995; Gamson, 1994; Matthews, Cooper, Davidson, & Hawkes, 1995).
Summary

The purpose of this chapter was to review the literature, both past and present, pertaining to alternative school education. This information is critical as it sets the tone for this study; a study that has been designed to determine what characteristics lead to successful student retention and graduate completion from alternative schools that have been in existence for a long time, and for those schools that are part of the growing boom in this country.

In the first section of this review, a brief history related to alternative education has been provided. This section began by discussing the financial burden on America with a high number of dropouts. This section also detailed the suggestions made from A Nation at Risk, and further discussed the impact of the failure of large schools and the subsequent move towards alternative forms of education that came about as the Civil Rights Movement gained prominence. Raywid (1994) discussed the factors leading to successful alternative schools. Another large portion of this section dealt with the growth of alternative forms of education stemming from the desire to remove disruptive students from the mainstream educational environment. Section two of the review detailed the understanding of learning communities and their impact on successful alternative schools. Sergiovanni (1993) provided a solid framework for modeling alternative schools around the components of learning communities. Methodology will be detailed in Chapter III.
CHAPTER III

METHODOLOGY

Introduction

The purpose of this study was to analyze rural alternative high schools in Iowa and to make quantitative comparisons on the factors that lead to successful retention of students and subsequent graduate completion. This study was conducted within the conceptual framework identified by Raywid (1994) and Wehlage and others (1989). This study was also conducted within the framework identified from various research on learning communities. Alternative coordinators and teachers were asked to fill out a survey instrument (see Appendix A) developed by this researcher and written to answer the five research questions from this study.

Research Questions

Based on the review of literature, this study sought to analyze rural alternative high schools in Iowa and make comparisons on factors leading to successful student retention and graduation. To do this, the following questions were identified:

1. What is the relationship, if any, between both teacher years of service and administrator years of service, and the impact on successful graduate completion?

2. What impact, if any, does the size of the school have on student
retention and graduate completion?

3. What does the relationship between teacher choice and student choice have on student retention and graduate completion?

4. What impact, if any, does the autonomy of the program have on student retention and graduate completion?

5. What impact, if any, does the use of learning community teaching methodologies (i.e. discovery learning and simulations) have on graduate completion?

Population

The population of alternative high schools chosen for this study were all schools classified by the Iowa High School Athletic Association as class A through class 3A. This included all school districts other than the largest 48. These top 48 are included in the 4A classification and were not utilized for this research study. Class A through 3A school districts have high school populations (grades 9-11) ranging from 26-545 students.

The total population of alternative schools and programs in the state of Iowa is currently at 108. Of these 108, 70 questionnaires were sent out to the schools classified for this project. This group comprised most of the schools currently in place in Iowa that are not part of a 4A size school district, and those that have been in existence for at least three years. This sample was also
contacted via e-mail prior to the study to verify that they had been in existence for at least three years (see Appendix B).

**Instrumentation**

In an effort to gather reliable data, a questionnaire was developed to learn specific characteristics that each school utilized in an attempt to foster a successful program. Questions asked were formulated from research gathered dealing with both the theory of learning communities and from research conducted by Raywid (1994) and Wehlage and others (1989).

The survey instrument itself was comprised of twelve questions, all directly related to the five research questions from this study. All questions on the survey were closed-ended and group intervals utilized for purposes of response were designed based on several pilot studies completed. Respondents were given the opportunity for open responses if desired. The first pilot study was conducted through the doctoral courses taught by Dr. Robert Boody, entitled: “Inquiry and Educational Practices” and “Educational Data Analysis and Interpretation.” This pilot study was completed during the 2003 – 2004 academic year. The second pilot study was quite informal and was conducted during the Fall and early Spring of the 2004-2005 academic year. It was comprised of several alternative school coordinators in the area who provided this researcher necessary feedback on the survey instrument developed.
The cover letter (see Appendix C) was designed with information gained from the Research courses described above. The text utilized was *Educational Research – An Introduction*, 7th Edition; by Gall, Gall, and Borg (2003).

**Data Collection**

The survey instruments were distributed to the alternative school coordinators/teachers in each district during March of 2005. Demographic information pertaining to the individual alternative schools was obtained from the Iowa Alternative Education Association’s website at: http://www.iaae.net/. The cover letter was included in the mailing to indicate the purpose of the study. It was also indicated through this cover letter that the Iowa Alternative Education Association had been contacted and supported this research study (see Appendix D). When necessary, a reminder by telephone or e-mail to those participants not yet responding was used to reestablish contact during the month of April.

**Data Analysis**

This dissertation took on a quantitative form and used demographic variables and categories to see both the similarities and differences between programs. It also looked at these similarities and differences in regards to size classification. The statistics procedures used were specific subprograms of the Statistical Program for the Social Sciences. The data analysis procedures used for answering each of the research questions, as presented in Chapter I, are
described below. It is assumed that the reader will have the survey instrument in
front of them to make the necessary comparisons.

Research Question 1. What is the relationship, if any, between both
teacher years of service and administrator years of service, and graduate
completion?

Questionnaire Items 2, 3 and 12

Research Question 2. What impact, if any, does the size of the school
have on student retention and graduate completion?

Questionnaire Items 4, 5, 8 and 12

Research Question 3. What does the relationship between teacher choice
and student choice have on student retention and graduate completion?

Questionnaire Items 6, 7, 8 and 12

Research Question 4. What impact, if any, does the autonomy of the
program have on student retention and graduate completion?

Questionnaire Items 8, 9, 10 and 12

Research Question 5. What impact, if any, does the use of learning
community teaching methodologies (i.e. discovery learning and
simulations) have on graduate completion?

Questionnaire Items 11 and 12

To find answers relevant to Research Question 1, data from survey items
2 and 3 were entered into the SPSS program. The program was then
commanded to compute a contingency table for each of the groups. Finally, a
Pearson Chi-Square test was performed to identify any possible statistical
significance dealing with teacher and administrator years of service and the subsequent relation to question 12 dealing with graduate completion.

In analyzing the data pertaining to Research Question 2, data from survey instrument questions 4 and 5 were entered into the SPSS program. Again, the program was commanded to compute a contingency table as well as a Pearson Chi-Square. This was done to check for statistical significance when comparing the size of the school with both graduate completion and student retention.

Research Question 3 was examined using data gained from survey instrument questions 6 and 7. Contingency tables and Pearson Chi-Square tests were performed to look for any relationship that may exist between teacher choice and student choice, and graduate completion and student retention.

Research Question 4 was examined using data gained from survey instrument questions 9 and 10. This data was also compared to questions 8 and 12 to determine if any statistical significance existed between the two.

Finally, the fifth and final research question was answered through an examination of survey instrument question 11. A Pearson Chi-Square test was commanded to search for statistical significance that may exist between both discovery learning and simulations, and the subsequent impact on graduate completion.
Pilot Study

To insure that the instrument developed and the data analysis procedures described above were appropriate for this particular study, a pilot study was conducted with a group of 30 alternative school instructors. These participants were all involved in instruction at alternative high schools in the northeast quadrant of Iowa. This area was chosen so as to help this researcher gain a high degree of response. The schools chosen also were classified in the Iowa High School Athletic Association as schools in class A through 3A. Unfortunately, data received were difficult to prove any type of significance due to the fact that only twenty-one surveys were returned. Of these 21, only 10 indicated the graduation rate. Without this information, data analysis was difficult. This information provided valuable assistance in designing a final version of the survey instrument that was much more user friendly.

For the purposes of the pilot study, a Pearson correlation was calculated examining Research Question 1 which looked at the relationship between the size of the alternative high schools and the subsequent graduate completion rate. A correlation coefficient that was not statistically significant was found, $r = .031$, $p = .931$, $N = 10$. The size of the school did not show a statistically significant relationship with these completion rates.

Table 1 indicates that when these graduate completion rates were placed in groups based on their specific sizes, the schools with 25 or fewer students
showed a Mean graduation rate of 51.10%. Those schools with 26 or more students showed a Mean graduation rate of 38.67%.

Table 1

Pilot Study Mean Graduation Percentage

<table>
<thead>
<tr>
<th>Size Class.</th>
<th>N</th>
<th>Mean</th>
<th>Std. Deviation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Under 25</td>
<td>10</td>
<td>51.10</td>
<td>18.562</td>
</tr>
<tr>
<td>26 and over</td>
<td>3</td>
<td>38.67</td>
<td>31.470</td>
</tr>
<tr>
<td>Total</td>
<td>13</td>
<td>48.23</td>
<td>21.288</td>
</tr>
</tbody>
</table>

A multiple linear regression was calculated predicting alternative high school graduate completion rates based on years of service for teachers, and years of service for administrators. The regression equation was not statistically significant, \( F(2,6) = .489, p = .636 \). Years of service for teachers and years of service for administrators did not provide a positive prediction of alternative high school graduate completion rates.

Table 2 shows that, once again, when the graduation rates were placed in groups based on the longevity of the teachers, the schools where the teacher had been present five years or more showed a Mean graduation rate of 55.71%.
Those schools where the teacher had been present four years or less showed a Mean graduation rate of 38.67%.

Table 2

_Pilot Study Mean Graduation Percentage_

<table>
<thead>
<tr>
<th>Tchr. Tenure</th>
<th>N</th>
<th>Mean</th>
<th>Std. Deviation</th>
</tr>
</thead>
<tbody>
<tr>
<td>5 yrs or more</td>
<td>7</td>
<td>55.71</td>
<td>20.814</td>
</tr>
<tr>
<td>4 yrs or less</td>
<td>3</td>
<td>38.67</td>
<td>31.470</td>
</tr>
<tr>
<td>Total</td>
<td>10</td>
<td>50.60</td>
<td>24.015</td>
</tr>
</tbody>
</table>

A correlation coefficient was calculated predicting alternative high school graduate completion rates and the schools’ linkages to the traditional high school, $r = .096$. The correlation coefficient was not statistically significant, $p = .779$. Linkages to the traditional high school did not provide a positive prediction of alternative high school graduate completion rates.

After thorough modification of the pilot study instrument, an additional pilot group was asked to assist in the interpretation and completion of the new design. This once again proved valuable for this researcher and helped narrow down final problems with the design and interpretation. This group also helped identify
the length of time required to complete the survey instrument. This information was included in the cover letter attached to the survey mailing.

Summary

As discussed throughout the first, second, and third chapters of this paper, this study was designed to analyze rural alternative high schools in Iowa and make comparisons on factors leading to successful student retention and graduation. To do this, the study made use of a survey instrument developed by the researcher and based on numerous studies addressing the characteristics of successful alternative schools and programs and the subsequent connections to positive learning communities. The survey was distributed via the United States Postal Service to seventy alternative schools that currently fall under the IHSSA classification of class A through class 3A. Once this information had been returned, the data was then analyzed using SPSS Version 11.5 to answer all research questions. Results from this analysis will be discussed at length in Chapter IV.
CHAPTER IV
ANALYSIS OF DATA

The purpose of this chapter is to present and analyze the data that has been collected as a part of this study. Once again, this data was collected using an author-created instrument based on research gathered dealing with both the theory of learning communities and from research conducted by Raywid (1994) and Wehlage and others (1989). Throughout the first section of this chapter, information pertaining to the respondents will be detailed. This information will include data related to the overall return rate as well as respondent demographics. Then, in the second section of this chapter, each of the five research questions posed in Chapter I will be addressed.

Return Rate and Respondent Demographics

The population in this study was made up of the coordinators and/or teachers of seventy alternative schools throughout the state of Iowa. These schools had been in existence at least three years and were classified through the Iowa High School Athletic Association as schools in class A through 3A. The largest 48 schools were omitted from this study due to their different environments and methods of instruction. These schools operate in a very similar manner to the traditional high school where several instructors teach various courses and students move from subject to subject. Since this is not where the largest growth in alternative schools has been, these types of schools were not
the focus of this study. Of the 70 potential respondents, 61 completed and returned the instrument. This yielded a return rate of 87%. Sixty-seven percent of the schools contacted replied to the initial survey mailing, 20% replied after a follow up e-mail, and 13% did not respond.

When completing survey question 1 pertaining to length of existence, respondents were asked to mark one of four options (see Table 6). They were to identify their school's length of existence as "less than 3 years", "3-5 years", "6-10 years", "11-15 years", or "more than 15 years." Of the 61 respondents, 54% identified their school as being in existence between 6 and 10 years, while 24.5% identified their school as being in existence between 11 and 15 years.

When analyzing the data pertaining to question 2 dealing with the tenure of the principal responsible for the alternative school, the frequency table shows a much greater distribution than the previous analysis dealing with the school's length of existence. Six categories of length of service were provided with the frequency percentage ranging from 8.2% to 27.9%. Out of 61 respondents, the range of frequencies was only 12. Table 6 indicates the distribution between the categories.

When analyzing the data from question 3 dealing with the tenure of the alternative school instructor, there was a much higher percentage of instructors that had been in their current position for at least six years as compared to those with under six years of experience. This may be strongly associated with their
decision to teach in that type of setting (which will be discussed in the results pertaining to question six). Refer to Table 3 for information concerning respondent demographics.

Table 3

*Respondent Demographic Information (N = 61)*

<table>
<thead>
<tr>
<th>Demographic Categories</th>
<th>Frequency</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Length of Existence</strong></td>
<td></td>
<td></td>
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<tr>
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Research Questions 1-5

Research Question 1

To answer Research Question 1: “What is the relationship, if any, between both teacher years of service and administrator years of service, and graduate completion?” the responses to survey instrument questions 2, 3, and 12 were analyzed. This information was then placed into the Statistical Program for the Social Sciences (SPSS) package and analyzed for statistical significance using the Pearson Chi-Square. Specific questions were also organized together and placed in a contingency table as crosstabs. These data can be found in Appendix E at the end of this paper.

As noted in Appendix E, when survey questions 2 and 12 were analyzed and placed in a contingency table, 56 respondents answered with specific knowledge about their principal tenure and subsequent graduate completion rate. Of these 56, 78.6% responded that more than one half of their students have graduated. The highest percentage of graduate completion (n = 13) showed up where the principal had been in his or her position from one to three years. Also worth noting was that a total of 19 respondents (34%) answered that their principal had been in his or her position from four to five years or six to ten years. Thus, of the 44 respondents answering that they had more than half of their students graduate, 59% came from alternative schools where the principal had at least four years of service to the district.
When a Pearson Chi-Square test was performed (see Appendix E, Questions 2 & 12) that looked at the relationship between a principal’s tenure and the subsequent graduate completion rate, a Chi Square = 9.88, df = 8, was not statistically significant, $p = .274$. Therefore, there is not sufficient evidence to support the research hypothesis and the null hypothesis must fail to be rejected. While it is a finding worth noting that 78.6% of the schools surveyed showed a graduate completion rate of more than half, the data does not support a positive relationship between this rate and the tenure of the building principal from which the students originated.

To further attempt to answer Research Question 1, questions 3 and 12 on the survey instrument were analyzed. These questions dealt with the tenure of the alternative school teacher and the subsequent graduate completion rate at the specific schools in question. From the contingency table generated and found in Appendix E, it is evident that 75.4% indicated that at least half of their students had graduated. Of these 46, 65% were found to be from schools where the teacher tenure had been at least six years. However, when analyzing all cells of the contingency table, it was evident that the data did not show a strong relationship between the two variables of teacher tenure and graduate completion.

When a Pearson Chi-Square test was performed between these two variables, a Chi Square = 5.70, df = 8, was not statistically significant, $p = .681$. 
As found in the previous analysis, the data does not support the research hypothesis and the null hypothesis must fail to be rejected.

Research Question 2

To answer Research Question 2, questions 4, 8, and 12 on the survey instrument were analyzed. The first analysis that was performed dealt with looking at the size of the school and the graduate completion rate. From the contingency table for survey questions 4 and 12, it can be noted that 98.3% of the respondents provided this information. Of these 60, 38.3% indicated that the size of their school was between 21 and 30 students. Schools with more than 30 students and those with 16 to 20 students both indicated a graduate completion rate of 21.6%. However, of these school sizes, only 80% showed a graduate completion rate of more than half. Thus, five of these schools had a graduate completion rate of only one fourth to one half of their students.

From this information, a Pearson Chi-Square test was then performed to look for any statistical significance that might exist. From the information above, and in looking at the contingency table in Appendix E, it was evident that the data did not support a positive relationship between the size of the alternative school and the subsequent graduate completion rate. Chi Square = 8.83, df = 8, p = .357. When analyzing these two specific variables, the data did not support the research hypothesis because it did not allow the ability to reject the null hypothesis.
To further answer Research Question 2, the two variables of school size and subsequent retention were analyzed. From the contingency table, it is evident that alternative schools ranging in size from 21 to 30 students had the greatest number of student retention. Of the 59 respondents, 20% indicated that one fourth to three fourths of their students remained in the alternative school setting for at least one full year. Another 18.6% responded that more than three fourths of their students stayed for one full year or more. Another high degree of retention existed with the schools that maintained over 30 students. In these schools, 69% of the respondents indicated that more than three fourths of their students stayed in school for one full year or more.

When a Pearson Chi-Square test was performed (see Appendix E, Questions 4 & 8) that looked at the relationship between school size and subsequent student retention, a Chi Square = 16.39, df = 8, was statistically significant, p = .037. However, the linear-by-linear p value of .976 indicates that there was not a linear relationship, and therefore it does not support the research hypothesis.

Research Question 3

To answer Research Question 3, questions 6, 7, 8, and 12 on the survey instrument were analyzed. The first analysis that was performed looked at whether or not teachers were satisfied in their decisions to teach in an alternative school setting and the impact, if any, this factor had on the graduate completion
rate within their schools. Of the 60 respondents, 81.6% were very satisfied with their decisions to teach in an alternative school setting. Of these 49, 79.6% indicated that their students graduated at a rate of more than one half. Another 16% indicated that one fourth to one half of their students graduated. Another 11.6% indicated that they were satisfied in their decision to teach in an alternative school setting, and showed that at least one fourth of their students graduated. Worth noting was that only 5% of the teachers indicated that they were dissatisfied at all to teach in the setting they were in.

When a Pearson Chi-Square test was performed (see Appendix E, Questions 6 & 12) that looked at the variables of teacher choice and graduate completion rate, a Chi Square = 12.44, df = 8, was not statistically significant, p = .132. While this relationship is stronger than in previous tests, it is not significant based on a .05 expectancy. Thus, the data that exists does not warrant support of the research hypothesis and we must fail to reject the null hypothesis.

Within Research Question 3, the next analysis that was performed looked at the variables of teacher choice and student retention. While 83% of the teachers indicated that they were very satisfied to teach in the alternative school setting they were in, only 47% of those responded that more than three fourths of their students remained in school for one full year or more. Another 49% indicated that one fourth to three fourths of their students remained in school for one full year or more. While these were strong numbers, and accounted for 83%
of the teachers that responded, there was not a strong relationship that existed to indicate a high degree of retention.

A Chi Square = 3.68, df = 6, was not statistically significant, \( p = .720 \). Therefore, there is not sufficient evident to support the research hypothesis and the null hypothesis must fail to be rejected.

As part of the analysis for Research Question 3, student choice and the graduate completion rate were discussed. From Appendix E, Questions 7 & 12, it is evident that 84.7% of the respondents indicated that more than three fourths of their students had come to the alternative school based on a mutual decision between themselves and the school's administration. The remaining 15.3% of the respondents indicated that one fourth to three fourths of their students came to the alternative school setting based on that same mutual decision.

When a Pearson Chi-Square test was performed (see Appendix E, Questions 7 & 12) that looked at the variables of student choice and graduate completion rate, a Chi Square = 3.30, df = 2, was not statistically significant, \( p = .192 \). Thus, there is not sufficient evidence to support the research hypothesis and the null hypothesis must fail to be rejected.

Another set of variables tested within Research Question 3 were student choice and subsequent retention in school. Once again, while 84.7% of the respondents indicated that more than three fourths of their students had come to the alternative school based on a mutual decision between themselves and the
school's administration, only 50% indicated a retention rate of more than three fourths. Another 48% indicated that only one fourth to three fourths of their students had remained in the alternative school for one full year or more. Of the remaining 9 respondents only 33% indicated that more than three fourths of their students had remained in the school for one full year or more.

When a Pearson Chi-Square test was performed, a Chi Square = 2.40, df = 2, was not statistically significant, p = .301. Therefore, the research hypothesis cannot be supported and the null hypothesis must fail to be rejected.

Research Question 4

In answering Research Question 4, survey questions 8, 9, 10, and 12 were analyzed. In the first analysis, the student use of auxiliary services at the regular high school and the impact, if any, on the graduate completion rate were observed. From the contingency table in Appendix E, Questions 9 & 12, it is quickly obvious that the respondents indicated a high degree of students not utilizing these services. While 47.5% of the respondents indicated that more than one half of their students had graduated, they also showed that less than one fourth of their students utilized auxiliary services at the regular high school. These services included the media center/library, the guidance office, and the health center. Only 16.4% indicated that more than one half of their students graduated and that within those same schools, more than three fourths of their students took advantage of auxiliary services at the regular high school.
Considering this low percentage, it is rather evident that a relationship between these two variables will not exist.

When a Pearson Chi-Square test was performed (see Appendix E, Questions 9 & 12) that looked at the relationship between the use of auxiliary services and the subsequent graduate completion rate at those schools, a Chi Square = 1.78, df = 4, was not statistically significant, p = .776. Thus, the data shows that the use of auxiliary services and subsequent graduation rate are not negatively related and the null hypothesis must fail to be rejected.

When the use of auxiliary services was compared to the student retention at specific alternative high schools, there was again found to be no relationship (see Appendix E, Tables 8 & 9). Questions 8 and 9 on the survey instrument were used to help answer this part of Research Question 4. From the contingency table, is it evident that 63.3% of the respondents indicated that their students took advantage of auxiliary services at the regular high school less than one fourth of the time. Further evident is that only 21.7% of the respondents indicated that their students utilized the auxiliary services more than three fourths of the time. While 46.7% indicated that more than three fourths of their students remained in their schools for one full year or more, 67.9% of those respondents showed that their students utilized auxiliary services less than one fourth of the time.
When a Pearson Chi-Square test was performed that looked at the relationship between the use of auxiliary services and the subsequent retention rate of those schools, a Chi Square = 2.34, df = 4, was not statistically significant, p = .673. Therefore, the data shows no real confidence in indicating any type of relationship between these two variables. There is not enough evidence to support the research hypothesis and the null hypothesis should fail to be rejected.

To further answer Research Question 4, and discuss the autonomy of the programs, survey instrument questions 10 and 12 were analyzed. These two variables consisted of the autonomy of the alternative school and the relationship, if any, that existed between that and the graduate completion rate of that school. Specifically, the autonomy of the school referred to the alternative school having the flexibility to work outside of the district bureaucracy, being relatively free from district interference, and buffered from demands of central office officials. As can be seen from the contingency table in Appendix E, Questions 10 & 12, the cells indicate a wide diversity of responses. While 77% of the respondents indicated that they either agree or strongly agreed that their school was relatively autonomous, their subsequent graduation rate was somewhat dispersed. 21.3% of these respondents indicated that one fourth to one half of their students graduated, while another 76.6% indicated that more than one half of their students graduated.
When a Pearson Chi-Square test was performed that looked at these two variables, a Chi Square = 8.86, df = 8, was not statistically significant, p = .355. The data does not support the research hypothesis and we must fail to reject the null hypothesis.

When a Pearson Chi-Square test was performed (see Appendix E, Questions 8 & 10) that looked at the autonomy of the schools and the subsequent retention rate, a Chi Square = 10.18, df = 8, was not statistically significant, p = .252. As this analysis indicates, when these two variables were compared, there is almost a 25% chance that these results would occur by chance. Thus, there is not sufficient evidence to support the research hypothesis and the null hypothesis must fail to be rejected.

Research Question 5

To answer Research Question 5, survey instrument questions 11 and 12 were analyzed. This question dealt with the impact, if any, that the use of learning community teaching methodologies such as discovery learning and simulations had on graduate completion. In the first analysis, the use of simulations was examined. As can be immediately seen from the contingency table, respondents answered in a variety of ways; and these responses were not at all strongly related to high graduation rates. 41% of the respondents indicated that they used simulations somewhat, but those same respondents showed graduation rates ranging from 20%, where one fourth to one half of their students
graduated, to 76%, where more than one half of their students graduated. These numbers alone show a wide variance in responses. On the opposite side of this, 26.2% of the respondents indicated that they used simulations very little. Within this group, 31.3% indicated that one fourth to one half of their students graduated and another 68.8% indicated that more than one half of their students graduated. Although not statistically significant, nine of the respondents made considerable use of simulations, and of this group, 88.9% showed a graduate completion rate of more than one half.

This evidence was further documented when a Pearson Chi-Square test was conducted (see Appendix E, Questions 11 & 12, for Simulations). A Chi Square = 4.12, df = 8, was not statistically significant, p = .846. Therefore, there is not sufficient evidence to support the research hypothesis and the null hypothesis must fail to be rejected.

The final analysis within Research Question 5 dealt with the teaching methodology of discovery learning and subsequent graduate completion rates. While only 11.5% of the respondents made considerable use of discovery learning in their alternative school settings, 71.4% showed a graduation rate of more than one half of their students. Another strong factor that was evident existed in the schools that said they used discovery learning moderately. Of these schools, 81.25% indicated a graduation rate of more than one half of their students.
When a Pearson Chi-Square test was conducted (see Appendix E, Questions 11 & 12, for Discovery Learning), a Chi Square = 8.06, df = 8, was not statistically significant, p = .428. Therefore, over 40% of any significance between the use of discovery learning and the impact on graduate completion rates would be due to chance. The data does not support the research hypothesis and we must fail to reject the null hypothesis.

Summary

This chapter was composed of two sections. In the first section, the data pertaining to the population in this study and the related demographics were reviewed. The second section of the chapter reported the results pertaining to each of the five research questions that were presented in Chapter I.

Research Question 1: "What is the relationship, if any, between both teacher years of service and administrator years of service, and graduate completion?" was addressed with the information collected from questions 2, 3, and 12 on the survey instrument. After a complete analysis of these questions, it was determined that no relationship existed between these variables. Both teacher tenure and administrator tenure showed strong relationships within some of the years of service categories, but there were no specific categories that lended themselves to strong relationships that were significant to the .05 expectancy level.
Research Question 2: “What impact, if any, does the size of the school have on student retention and graduate completion?” was addressed with the information collected from questions 4, 8, and 12 on the survey instrument. There existed no statistical relationship between the size of alternative schools and the impact of that size on graduate completion rates. There also existed no significant negative relationship between school size and student retention.

Survey instrument questions 6, 7, 8, and 12 were used to answer Research Question 3: “What does the relationship between teacher choice and student choice have on student retention and graduate completion?” When the data were analyzed and chi-square tests were computed, the results indicated a wide range of levels of significance. Between the variables of teacher choice and graduate completion, there existed no statistically significant relationship when compared to the .05 expectancy level. However, 13% of the relationship would be considered to have occurred by chance. This low percentage lends itself well to further research in this area. Also showing no significance were the two variables of teacher choice and student retention. This test indicated that as much as 72% of any relationship would be considered to have occurred by chance. While respondents indicated a high level of satisfaction in their choice to teach in an alternative school setting (95%), their levels of student retention varied far too much to be considered significant. Another set of variables that indicated no relationship based on the .05 expectancy level were that of student
choice and graduation rate. The chi-square test indicated that as much as 19% of any relationship would occur by chance. The final analysis within this question was conducted between the variables of student choice and retention. The tests performed indicated that as much as 30% of any relationship would occur by chance.

When answering Research Question 4: "What impact, if any, does the autonomy of the program have on student retention and graduate completion?", survey questions 8, 9, 10, and 12 were analyzed. The results indicated no statistically significant relationships between any of the variables. When looking at the analysis of the variables that dealt with the use of auxiliary services at the regular high school, the significance levels were very weak. However, the research in Chapter II further documents that successful alternative schools are typically smaller in size and that this size does not allow for the use of these auxiliary services. Thus, while there existed no statistically significant relationship, they actually support earlier research that was conducted.

Survey instrument questions 11 and 12 were analyzed to answer Research Question 5: "What impact, if any, does the use of learning community teaching methodologies (i.e. discovery learning and simulations) have on graduate completion?" The variable of discovery learning indicated a 43% probability that the significance was by chance, while the simulations variable
indicated an 85% probability that any observed results was by chance. As is evident with this data, the learning communities phenomenon may lead to strong communities of learning, but the specific methodologies selected from earlier research do not tend to have much of an impact on graduate completion.
CHAPTER V
SUMMARY, CONCLUSIONS, IMPLICATIONS, OBSERVATIONS/DISCUSSION, RECOMMENDATIONS, AND FUTURE RESEARCH

This study answered five research questions pertaining to the characteristics of effective alternative high schools in rural Iowa. Participating instructors/coordinators were surveyed through a self-administered instrument, and the surveys were analyzed in an effort to provide individuals and organizations concerned with the success and development of alternative high schools in the state of Iowa with accurate data and guidance.

Summary

Are successful alternative high schools related to specific size, tenure of administration and/or teachers, or student choice and teacher choice? Are these schools more likely to be successful if they remain autonomous from the traditional school? Do specific methodologies found in learning communities lend themselves to successful alternative schools? Answers to these questions and all other findings in this study have been summarized in the following manner:

Research Question 1

Research Question 1 was designed to determine if any relationship existed between teacher years of service and administrator years of service, and graduate completion rates. The data used to answer this question was summarized from survey instrument questions 2, 3, and 12. After a complete
analysis of these questions, it was determined that the highest percentage of administrators had only been in their jobs 1 to 3 years. This data supported the information from the School Administrators of Iowa which indicated the recent high turnover in administrators due to retirement. A further piece of information regarding administrator tenure was that the frequency dispersion was very small between all categories. No categories showed a marked high or low degree of responses.

In the analysis of instructor tenure, nearly 50% of the respondents indicated that they had been in their current position for 6 to 10 years. This data helps to further support the findings from survey question 6 that dealt with the degree of satisfaction that instructors had in regards to their current position.

Research Question 2

Data collected from survey questions 4, 8, and 12 were analyzed to answer Research Question 2 dealing with the relationship between the size of the school and whether this variable had an impact on student retention and graduate completion rates. The largest percentage of respondents (38.3%) indicated that their school size ranged from 21 to 30 students. All other categories of size classification were widely dispersed. When these categories of size were compared with graduate completion rates, there were no significant relationships that existed. However, when these same size categories were compared with student retention rates, there was a statistically significant
relationship that indicated that the data were not random. Unfortunately, the hypothesized linear relationship was not found.

**Research Question 3**

Research Question 3 dealing with the relationship between student choice and teacher choice and subsequent graduate completion rates and student retention was answered with the data collected from survey questions 6, 7, 8, and 12. When the data were analyzed, the results indicated that over 81% of teachers were very satisfied to teach in the alternative school setting. Of these teachers, 79.6% indicated that at least one half of their students graduated. When this same data were analyzed to determine if a relationship existed between teacher choice and student retention, the findings were much more dispersed. Almost 50% of the teachers that were very satisfied in their chosen profession indicated that only one fourth to three fourths of their students remained in school for one full year or more. Thus, the findings were not statistically significant when the variables of teacher choice and student retention were analyzed.

When survey question 7 was analyzed that dealt with student choice, similar findings prevailed. While over 84% of the respondents indicated that their students had come to their alternative school based on a mutual decision, their subsequent graduate completion rates did not indicate a statistically significant relationship. When this same data were analyzed in comparison to student
retention, the results indicated a lesser degree of relationship. Forty-eight percent of respondents indicated that only one fourth to three fourths of their students had remained in school for one full year or more. The p value of .301 was considerably higher than the previous data analysis regarding graduation rates. Thus, there was no statistically significant relationship that existed between student choice and both graduate completion rates and student retention.

Research Question 4

Data collected from survey questions 8, 9, 10, and 12 were analyzed to answer Research Question 4 dealing with the relationship between the autonomy of the alternative school program and both graduate completion rates and student retention. In the first analysis, teachers were asked to indicate their student's usage of auxiliary programs at the traditional high school. This usage was compared to graduation rates to look for any type of relationship. While nearly 76% of respondents indicated that more than one half of their students graduated, they also indicated that less than one fourth of these same students utilized such services as the library, guidance office, and health centers at the traditional high schools. This data alone indicated that no relationship existed between the use of auxiliary services and graduation rates. A Pearson-Chi Square test further yielded a p value of .776.

Survey question 10 dealing with the autonomy of the alternative school program was then compared to subsequent graduate completion rates within
those same schools. While over 75% of the respondents felt that their school was autonomous, there existed no statistically significant relationship between these findings and higher graduate completion rates.

The student retention rates were then compared to both the usage of auxiliary services and the feelings of autonomy. In the first analysis, the use of auxiliary services were reviewed and a Pearson-Chi Square test was conducted that looked at any relationship that might exist between these auxiliary services and a positive student retention rate. While nearly 50% of the respondents indicated that more than three fourths of their students remained in school for one full year or more, almost 70% of those same respondents indicated that their students utilized auxiliary services less than one fourth of the time.

In the analysis of student retention rates and feelings of autonomy, over 75% of the respondents felt that their alternative school had the flexibility to work outside of the district bureaucracy, were relatively free from district interference, and were buffered from the demands of central office officials. However, the graduate completion rates at these schools were quite dispersed. The Pearson-Chi Square test furthered indicated this disparity by indicating that nearly 25% of any relationship between these two variables would occur by chance. Thus, there was found to be no statistically significant relationship between feelings of autonomy and student retention rates.
Research Question 5

Data from survey questions 11 and 12 were analyzed to help find answers to Research Question 5 that dealt with determining if any relationships existed between schools that utilized specific learning community teaching methodologies and graduate completion rates. Data from these analyses immediately indicated a wide disparity in responses with no specific relationship to graduate completion rates. Respondents indicated a variety of answers to their usage of both simulations and discovery learning at their alternative school settings. While some specific graduate completion rates were quite high, there was no statistically significant relationship to higher rates at these same schools. In fact, when a Pearson-Chi Square test was conducted for the use of simulations, the value of $p$ indicated that over 80% of any relationship between these two variables would occur by chance. The relationship between the use of discovery learning and subsequent graduation rates was considerably better; though not statistically significant. The Pearson-Chi Square test indicated a $p$ value of .428. Once again, the use of this learning community methodology did not prove to be statistically significant at the .05 expectancy level.

Conclusions

This study sought to determine, through a self-administered survey, if specific characteristics of alternative high schools in rural Iowa lended themselves to higher graduate completion and retention rates for their students.
The following conclusions have been drawn based on a review of the relevant literature as well as on the findings of this study.

1. Of the 70 alternative high schools chosen for this study, over half indicated that they had been in existence for less than ten years. This finding was consistent with the research results of Holland (2002), Young (1990), and Walberg (1992).

2. The respondents in this study indicated that their alternative schools were quite small. Sixty percent showed that thirty or fewer students attended their schools. This finding was consistent with the research results of DeBlois (2000), Berlin and Cienkus (1989), and Raywid (1994).

3. Alternative school teachers and coordinators throughout this study indicated a very high degree of satisfaction with their jobs. Over 80% showed that they were very satisfied with their decision to teach in the alternative school setting. In addition, 85% of the respondents indicated that they believed that their students chose the alternative school setting based on their own decision. These findings were consistent with the research results of Raywid (1994), Isaacson and Bamburg (1992), and Marshak (1998).

4. The largest percentage of administrators involved in this study (52.4%), had been in their positions less than five years. This data supports the recent reports from the School Administrators of Iowa (SAI) indicating the large turnover in Iowa administrators.
5. There existed no statistically significant relationship between the student use of auxiliary services at the traditional high school and subsequent graduate completion rates. This data indicated that successful alternative schools were small in nature and that their size limited the opportunities for students to take advantage of these services. These findings were consistent with the research results of Raywid (1994).

While many of the conclusions drawn from this study supported the research from Chapter II, the vast majority of the statistical tests that were conducted did not prove to be significant at the level of expectancy. Several conclusions can be drawn from these results.

1. While alternative schools, in some form, have been around for well over fifty years, their large expansion in the state of Iowa has been much more recent. This fact tends to limit the body of knowledge that can be drawn from participating alternative school instructors.

2. Specific characteristics that were tested for were very quantitative in nature. However, effective schools of any type are still guided by simple characteristics such as caring instructors, relevant curriculum, and students that are motivated to succeed in areas where they have not always been successful. These characteristics are very subjective in nature and difficult to test for.

3. The categories utilized on the survey instrument were quite specific
and small in range. While these types of categories lend themselves to more objective data, they tend to limit the findings of statistical significance. One can assume that broader categories would have likely increased the chances of finding statistical significance between several of the variables tested.

4. Consistent findings to research do not always indicate that a statistical significance will exist between two variables. Simply looking at percentages may indicate that some degree of relationship may exist. However, proving that relationship to be statistically significant at the .05 expectancy level is much more difficult due to the countless factors that play a role in any type of quantitative testing.

**Implications**

While the body of literature containing information about alternative high schools is quite extensive, the information regarding current practices and effective methodologies is lacking. One aspect that was discussed in the literature was specific to accountability. While alternative high schools in the past did not adhere to the same types of accountability standards; that is drastically changing. Current alternative high schools must now live by the same standards and assessment criteria as traditional schools.

Another implication from this study is the information found through the survey and yet identified as not being statistically significant. While the majority of the variables tested did not yield a statistical significance near the .05 expectancy
level, a larger group of respondents may very well broaden the scope of responses and thus increase the chances for significance.

As school districts search frantically for ways to save money and resources, alternative schools will most certainly figure into this search. While schools do not typically view students in terms of dollars, every student that they prevent from dropping out is a savings of roughly $5000. Alternative schools not only help prevent students from dropping out of school completely, but they also keep students on the district “roster.” Add to these factors the research from Morley (1991) indicating that alternative school graduates tend to become productive citizens, and the evidence lends itself strongly to a continued growth in alternative forms of education.

Observations/Discussion

The growth of alternative high schools in Iowa has been extensive and widespread. However, this growth has come at such a rapid pace that many characteristics that lend themselves to at-risk student success have been overlooked.

Successful alternative schools must be built upon the premise that all students can succeed and graduate. To facilitate this success, these schools need to incorporate not only quantitative characteristics such as small size and specific teaching methodologies, but they must embellish those subjective traits that make all effective schools what they are. Traits such as caring people
building a community of learners, as well as those caring people facilitating an environment where effective teaching and learning is commonplace. While these subjective characteristics can be enhanced by objective variables researched in this paper, one does not specifically rely on the other.

While the levels of statistical significance found in this paper did not indicate any of the research hypotheses to be supported by the data, the data should still prove beneficial in facilitating future thought and research. Alternative schools currently in existence, as well as those districts considering starting these types of schools, can learn a great deal about what factors lead to effective programming. This research should also help those same schools realize what is not a specific requirement for success. In both methods, administrators and program coordinators have a body of research that can help provide them with knowledge that did not previously exist.

Recommendations

Based on the findings of this study, as well as the research conducted in Chapter II, several recommendations can be offered.

1. A larger group of respondents might very well strengthen the relationship between variables to the levels considered to be significant.

2. The data analyzed in response to the use of various teaching methodologies found in learning communities did not show any type of relationship. While there is considerable research on the benefits of learning
communities, their effectiveness with regards to alternative school students might very well be attributed to other characteristics.

3. Since so many of the schools identified had been in existence for less than ten years, many of the characteristics of these schools will have likely been altered simply due to program coordinators’ efforts to improve upon what is and isn’t working. In these schools, the data available on graduate completion and student retention will also be limited simply due to their length of existence.

4. While the research hypotheses could not be supported statistically, it appears to this researcher that further research is warranted.

Recommendations for Future Research

This body of research could be enhanced by several factors.

1. While a response rate of 87% is very good, with only 70 schools being contacted, the scope of this research was quite limited. A larger group of respondents would undoubtedly yield far extending results. Since the educational system in the state of Iowa compares favorably to states such as Wisconsin, Minnesota, and Illinois, a future study encompassing alternative schools in these states would broaden the results considerably.

2. While specific teaching methodologies incorporated in various learning communities did not indicate any type of relationship with increased graduate completion rates, only discovery learning and simulations were examined. It also became rather evident that the presence of these teaching methodologies were
not the critical factors that led to higher levels of graduate completion. Rather, future research may very well be enhanced by looking at other characteristics of learning communities; such as shared visions, creating a sense of belonging, and student learning. While these characteristics may be more difficult to examine, the effects of these factors appeared to be much greater in improving graduate completion than simply incorporating methodologies typically utilized in learning communities.

3. The choice of categories utilized on the survey instrument could be examined. Broadening the choices available would likely lead to even less subjectivity and estimation on the part of the respondent. It could be assumed that these changes would lead to a higher percentage of tests that proved to be statistically significant at the expectancy level.
REFERENCES


Boyd, V. (1992). School context: Bridge or barrier to change? [Electronic version]. Austin, TX: *Southwest Educational Development Laboratory*.


Southwest Educational Development Laboratory (1997). Professional Learning Communities: Outcomes of Professional Learning Communities for Students and Staffs [Electronic version]. Austin, TX.


APPENDIX A

SURVEY INSTRUMENT
This questionnaire is intended for the person or persons most knowledgeable about the alternative schools and programs in your school district. Please feel free to collaborate with others who are able to help provide the required information. If you wish to make an additional response to a question, please feel free to do so.

1. How long has your alternative school or program been in existence?
   
   - [ ] 3 - 5 years  
   - [ ] 6 - 10 years  
   - [ ] 11 - 15 years  
   - [ ] more than 15 years

2. To the best of your knowledge, how long has the high school principal, within your district, been in his/her job?
   
   - [ ] 1 - 3 years  
   - [ ] 4 - 5 years  
   - [ ] 6 - 10 years  
   - [ ] 11 - 15 years  
   - [ ] more than 15 years

3. How long have you been in your current position as teacher/director of your alternative school or program?
   
   - [ ] 1 - 3 years  
   - [ ] 4 - 5 years  
   - [ ] 6 - 10 years  
   - [ ] 11 - 15 years  
   - [ ] more than 15 years

4. At the present time, how many students are enrolled in your alternative school or program?
   
   - [ ] less than 10  
   - [ ] 11 - 15  
   - [ ] 16 - 20  
   - [ ] 21 - 30  
   - [ ] more than 30

5. What is your maximum capacity?
   
   - [ ] less than 10  
   - [ ] 11 - 15  
   - [ ] 16 - 20  
   - [ ] 21 - 30  
   - [ ] more than 30

6. How satisfied are you with your decision to teach in an alternative school setting?
   
   - [ ] very satisfied  
   - [ ] satisfied  
   - [ ] dissatisfied  
   - [ ] very dissatisfied

7. About what proportion of your students came to your alternative school based on a mutual decision between themselves and the school's administration?
   
   - [ ] less than one fourth  
   - [ ] one fourth to three fourths  
   - [ ] more than three fourths

8. About what proportion of your students stay in alternative school for one full year or more?
   
   - [ ] less than one fourth  
   - [ ] one fourth to three fourths  
   - [ ] more than three fourths

9. About what proportion of your students have visited any of the following auxiliary services at the regular high school: library, guidance, and/or health services?
   
   - [ ] less than one fourth  
   - [ ] one fourth to three fourths  
   - [ ] more than three fourths
10. For purposes of this study, autonomy refers to alternative schools having the flexibility to work outside of district bureaucracy; are relatively free from district interference; and are buffered from demands of central school officials. From your perspective, please rate your agreement or disagreement with this statement: "This alternative educational program is relatively autonomous."

☐ strongly agree  ☐ agree  ☐ disagree  ☐ strongly disagree

11. Discovery Learning requires that students learn through direct or hands-on experiences.

Simulations require that students are engaged in real life activities that provide them with essence or essential elements of the real situation.

To what degree are your alternative school students involved in these characteristics of learning communities?

Discovery Learning  ☐ very little  ☐ somewhat  ☐ moderately  ☐ considerably

Simulations  ☐ very little  ☐ somewhat  ☐ moderately  ☐ considerably

12. About what proportion of your alternative school or program students complete the necessary requirements for graduation?

☐ less than one fourth  ☐ one fourth to one half  ☐ more than one half
APPENDIX B

CORRESPONDENCE WITH TEACHERS
Great! We will support your work in any way we can. Alternative people are so good to share and help one another. Alternative High School in the Community School District is in the middle of the seventh year.

At 07:51 AM 2/3/2005 -0600, you wrote:
> Dear Alternative High School instructor:
> My name is Tim Gilson and I am the principal at Oelwein High School. I am
> formalizing my doctoral dissertation entitled "Alternative High Schools:
> What Factors Lead to the Greatest Level of Effectiveness?" It is my hope
> that this dissertation will help provide usable information for all of us
> involved in at-risk types of education. In the future I am planning to
> ask all of you to take about 5 minutes to fill out a questionnaire.
> However, to proceed I need to make sure that the schools I ask to
> participate have been in existence at least three years. I have been in
> contact with the president of the Iowa Alternative Education Association,
> and we both feel that this information can help all programs in the state
> of Iowa. I would greatly appreciate it if you would answer this one
> question and reply back to me so that I can continue with my study.
> "How long has your alternative school/program been in existence?"
>
> Thank you,
> Tim W. Gilson
> Oelwein High School Principal
>
> --
>
> This message has been scanned for viruses and
> dangerous content by MailScanner, and is
> believed to be clean.
APPENDIX C

COVER LETTER
Dear Alternative School Instructor/Coordinator:

I am a doctoral student at the University of Northern Iowa. As a part of my studies in the Department of Educational Leadership, I am conducting a survey regarding the effectiveness and success rates of alternative high schools in rural Iowa. I am asking for your voluntary participation in this study.

This survey has been designed so that you can complete it in under five minutes. You can be absolutely sure that all of the information that you provide is strictly confidential, and that your responses will be combined with many others and used only for my research on the successful alternative school characteristics. There are no foreseeable risks to participation. The survey instruments have been numbered for follow-up purposes only, and all data will be destroyed upon completion of this study.

I sincerely appreciate your time and effort with this study, and truly believe that the results of my research can benefit all of us involved in at-risk types of education. The Iowa Alternative Education Association, in response to the important role that this research can help support, believes in the benefits of this study and has agreed to lend their vote of approval; as indicated by Stephen Peters' signature at the bottom of this letter.

Should you have any questions about the study, I can be contacted at 319-283-2731. Additional inquiries may be made to Dr. Robert Decker, faculty advisor, at 319-273-2443. You can also contact the office of the Human Participants Coordinator, University of Northern Iowa, at 319-273-2748, for answers to questions about rights of research participants and the participant review process. Thank you again for your participation.

Sincerely,

Tim W. Gilson
Doctoral Candidate
University of Northern Iowa
tgilson@oelwein.k12.ia.us

Stephen Peters
President - Iowa Association of Alternative Education
APPENDIX D

CORRESPONDENCE WITH IOWA ALTERNATIVE EDUCATION ASSOCIATION PRESIDENT
You may use the IAAE in your cover letter, and say we support your efforts.

Steve Peters

-----Original Message-----
From: Tim W. Gilson [mailto:tgilson@oelwein.k12.ia.us]
Sent: Monday, January 31, 2005 7:55 AM
To: Peters, Stephen
Subject: dissertation topic of interest

Stephen:

My name is Tim Gilson and I am a doctoral students, finishing up my degree at UNI. My dissertation is entitled - Alternative Schools: What Factors Lead to the Greatest Level of Effectiveness?

Upon completion of my study, I hope to have a considerable amount of information that can help alternative school/programs better serve the needs of our students. In working with my local alternative school coordinator, as well as my dissertation committee, it was suggested to me that if the Iowa Association for Alternative Education supported my study it may help elicit a strong response from my questionnaires that I will be sending out to 76 various programs.

I am asking for your voice of support in this matter. With your help, I can mention your organization's support on the cover letter attached to the questionnaires. I would have called to talk to you personally, but I only had your e-mail from the conference back on the 22nd of November.

Thank you and I look forward to hearing from you-
Tim Gilson, Principal - Oelwein High School
APPENDIX E

STATISTICS AND CONTINGENCY TABLES
### Qst. 2 & 12 - Pearson-Chi Square and Contingency Tables

Principal Tenure and Graduate completion Rate

**N = 56**

#### Yrs of Serv. * Grad. Rate Crosstabulation

<table>
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<tr>
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<th>Total</th>
</tr>
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<tr>
<td><strong>Count</strong></td>
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<tr>
<td><strong>% within Grad. Rate</strong></td>
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<td>100.0%</td>
</tr>
<tr>
<td><strong>% of Total</strong></td>
<td>3.6%</td>
<td>17.9%</td>
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### Chi-Square Tests

<table>
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<th>Test</th>
<th>Value</th>
<th>df</th>
<th>Asymp. Sig. (2-sided)</th>
</tr>
</thead>
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* a. 11 cells (73.3%) have expected count less than 5. The minimum expected count is .18.

**Footnotes:**

Graduate Completion categories –
- 1 = Less than one fourth
- 2 = One fourth to one half
- 3 = More than one half

Years of Service –
- 13 = 1 – 3 years of service
- 45 = 4 – 5 years of service
- 610 = 6 – 10 years of service
- 1115 = 11 – 15 years of service
- 15 = More than 15 years
Qst. 3 & 12 - Pearson-Chi Square and Contingency Tables
Teacher Tenure and Graduate completion Rate
N = 61

Yrs of Serv. * Grad. Rate Crosstabulation

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### Chi-Square Tests

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*a. 10 cells (66.7%) have expected count less than 5. The minimum expected count is .07.*

**Footnotes:**

Graduate Completion categories –  
1 = Less than one fourth  
2 = One fourth to one half  
3 = More than one half

Years of Service –  
13 = 1 – 3 years of service  
45 = 4 – 5 years of service  
610 = 6 – 10 years of service  
1115 = 11 – 15 years of service  
15 = More than 15 years
Qst. 4 & 12 - Pearson-Chi Square and Contingency Tables
School size and Graduate completion rate
N = 60

Size of School * Grad. Rate Crosstabulation

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### Chi-Square Tests

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a. 12 cells (80.0%) have expected count less than 5. The minimum expected count is .17.

**Footnotes:**

Graduate Completion categories –
- 1 = Less than one fourth
- 2 = One fourth to one half
- 3 = More than one half

Student Enrollment categories –
- 10 = Less than 10 students
- 1115 = 11 – 15 students
- 1620 = 16 – 20 students
- 2130 = 21 – 30 students
- 30 = More than 30 students
## Qst. 4 & 8 - Pearson-Chi Square and Contingency Tables
### School size and Retention
**N = 59**

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### Chi-Square Tests

<table>
<thead>
<tr>
<th>Test</th>
<th>Value</th>
<th>df</th>
<th>Asymp. Sig. (2-sided)</th>
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</thead>
<tbody>
<tr>
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* a. 9 cells (60.0%) have expected count less than 5. The minimum expected count is .14.

**Footnotes:**

Student Retention categories –
1 = Less than one fourth
2 = One fourth to three fourths
3 = More than three fourths

Student Enrollment categories –
10 = Less than 10 students
11 - 15 = 11 – 15 students
16 - 20 = 16 – 20 students
21 - 30 = 21 – 30 students
30 = More than 30 students
Qst. 6 & 12 - Pearson-Chi Square and Contingency Tables
Teacher choice and Graduate completion rate
N = 60

Tchr Choice * Grad. Rate Crosstabulation

<table>
<thead>
<tr>
<th>Tchr Choice</th>
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<th>Total</th>
</tr>
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<td>1</td>
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<td>0%</td>
</tr>
<tr>
<td>d</td>
<td>Count</td>
<td>0</td>
</tr>
<tr>
<td>% within Tchr Choice</td>
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<td>.0%</td>
</tr>
<tr>
<td>% within Grad. Rate</td>
<td>.0%</td>
<td>.0%</td>
</tr>
<tr>
<td>% of Total</td>
<td>.0%</td>
<td>.0%</td>
</tr>
<tr>
<td>s</td>
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<tr>
<td>vd</td>
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<tr>
<td>% within Grad. Rate</td>
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<tr>
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### Chi-Square Tests

<table>
<thead>
<tr>
<th></th>
<th>Value</th>
<th>df</th>
<th>Asymp. Sig. (2-sided)</th>
</tr>
</thead>
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<tr>
<td>Pearson Chi-Square</td>
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- 12 cells (80.0%) have expected count less than 5. The minimum expected count is .03.

**Footnotes:**

Graduate Completion categories -
1 = Less than one fourth
2 = One fourth to one half
3 = More than one half

Teacher Choice categories --
vs = Very satisfied
s = Satisfied
d = Dissatisfied
vd = Very dissatisfied

---

---
# Teacher choice and Retention

**N = 59**

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<tr>
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<td>.0%</td>
<td>100.0%</td>
<td>100.0%</td>
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<tr>
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<td>% within Retention</td>
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</tr>
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**Total**

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### Chi-Square Tests

<table>
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<tr>
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<tr>
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a. 10 cells (83.3%) have expected count less than 5. The minimum expected count is .03.

**Footnotes:**

Student Retention categories –
1 = Less than one fourth
2 = One fourth to three fourths
3 = More than three fourths

Teacher Choice categories –
vs = Very satisfied
s = Satisfied
d = Dissatisfied
vd = Very dissatisfied
Qst. 7 & 12 - Pearson-Chi Square and Contingency Tables

Student choice and Graduate completion rate

N = 59

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<tr>
<td>% of Total</td>
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Footnotes:

Graduate Completion categories –
1 = Less than one fourth
2 = One fourth to one half
3 = More than one half

Student Choice categories –
1 = Less than one fourth
2 = One fourth to three fourths
3 = More than three fourths

**no respondents indicated category #1 for student choice**
### Stdnt Choice * Grad. Rate Crosstabulation

<table>
<thead>
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<th>Stdnt Choice</th>
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<th>% within Grad. Rate</th>
<th>% of Total</th>
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<tr>
<td>2</td>
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<td>15.3%</td>
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</table>

### Chi-Square Tests

<table>
<thead>
<tr>
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<th>Value</th>
<th>df</th>
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a. 3 cells (50.0%) have expected count less than 5. The minimum expected count is .31.
Qst. 7 & 8 - Pearson-Chi Square and Contingency Tables
Student Choice and Retention
N = 59

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<tr>
<td>% of Total</td>
<td>3.4%</td>
<td>49.2%</td>
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<td></td>
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</tbody>
</table>

Footnotes:

Student Retention categories –
1 = Less than one fourth
2 = One fourth to three fourths
3 = More than three fourths

Student Choice categories –
1 = Less than one fourth
2 = One fourth to three fourths
3 = More than three fourths

**no respondents indicated category #1 for student choice**
## Stdnt Choice * Retention Crosstabulation

| Stdnt Choice | Count | 3 | 9 | % within Stdnt Choice | 33.3% | 100.0% | % within Retention | 10.7% | 15.3% | % of Total | 5.1% | 15.3% | 3 Count | 25 | 50 | % within Stdnt Choice | 50.0% | 100.0% | % within Retention | 89.3% | 84.7% | % of Total | 42.4% | 84.7% | Total Count | 28 | 59 | % within Stdnt Choice | 47.5% | 100.0% | % within Retention | 100.0% | 100.0% | % of Total | 47.5% | 100.0% |

### Chi-Square Tests

<table>
<thead>
<tr>
<th>Test Type</th>
<th>Value</th>
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<th>Asymp. Sig. (2-sided)</th>
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*a. 4 cells (66.7%) have expected count less than 5. The minimum expected count is .31.
Qst. 9 & 12 - Pearson-Chi Square and Contingency Tables
Use of Auxiliary Services and Graduate completion rate
N = 61

<table>
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**Chi-Square Tests**

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<tr>
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</thead>
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<tr>
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<td></td>
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</table>

*a* 5 cells (55.6%) have expected count less than 5. The minimum expected count is .33.

Footnotes:

Graduate Completion categories –
1 = Less than one fourth  
2 = One fourth to one half  
3 = More than one half

Use of auxiliary service categories –
1 = Less than one fourth  
2 = One fourth to three fourths  
3 = More than three fourths
AQA 8 & 9 - Pearson-Chi Square and Contingency Tables

Use of auxiliary services and retention

\( N = 60 \)

### Aux. Serv. * Retention Crosstabulation

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<td>31.7%</td>
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### Chi-Square Tests

<table>
<thead>
<tr>
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a. 5 cells (55.6%) have expected count less than 5. The minimum expected count is .30.

**Footnotes:**

Student Retention categories –
1 = Less than one fourth
2 = One fourth to three fourths
3 = More than three fourths

Use of auxiliary service categories –
1 = Less than one fourth
2 = One fourth to three fourths
3 = More than three fourths
**Qst. 10 & 12 - Pearson-Chi Square and Contingency Tables**

**Autonomy and Graduate completion rate**

*N = 61*

<table>
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<tr>
<td>% within Grad. Rate</td>
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<tr>
<td>% of Total</td>
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**Autonomy * Grad. Rate Crosstabulation**

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<th>Total</th>
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<td>21.3% 75.4%</td>
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### Chi-Square Tests

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<thead>
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<th>df</th>
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a. 11 cells (73.3%) have expected count less than 5. The minimum expected count is .03.

Footnotes:

Graduate Completion categories –
1 = Less than one fourth
2 = One fourth to one half
3 = More than one half

Feelings of autonomy categories –
sa = Strongly agree
a = Agree
d = Disagree
sd = Strongly disagree
### Qst. 8 & 10 - Pearson-Chi Square and Contingency Tables

**Autonomy and Retention**

\( N = 60 \)

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<thead>
<tr>
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</thead>
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<tr>
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<tr>
<td>% within Retention</td>
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<tr>
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## Chi-Square Tests

<table>
<thead>
<tr>
<th></th>
<th>Value</th>
<th>df</th>
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</tr>
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<tbody>
<tr>
<td>Pearson Chi-Square</td>
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</table>

a. **11 cells (73.3%) have expected count less than 5. The minimum expected count is .03.**

Footnotes:

Student Retention categories –
1 = Less than one fourth
2 = One fourth to three fourths
3 = More than three fourths

Feelings of autonomy categories –
sa = Strongly agree
a = Agree
d = Disagree
sd = Strongly disagree
### Qst. 11 & 12 - Pearson-Chi Square and Contingency Tables

Simulations and Graduate completion rate  
**N = 61**

#### Simulations * Grad. Rate Crosstabulation

<table>
<thead>
<tr>
<th>Simulations</th>
<th>Grad. Rate</th>
<th>1</th>
<th>2</th>
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</thead>
<tbody>
<tr>
<td>Count</td>
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<table>
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<th>11.1%</th>
<th>7.7%</th>
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</thead>
<tbody>
<tr>
<td></td>
<td>% within Grad. Rate</td>
<td>15.4%</td>
<td>1.6%</td>
</tr>
<tr>
<td></td>
<td>% of Total</td>
<td>3.3%</td>
<td></td>
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<tr>
<td></td>
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<td>1.6%</td>
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</table>

**Footnotes:**

Graduate Completion categories –

1 = Less than one fourth  
2 = One fourth to one half  
3 = More than one half

Use of Simulations' categories –

vl = Very little  
s = Somewhat  
m = Moderately  
c = Considerably
Simulations * Grad. Rate Crosstabulation

<table>
<thead>
<tr>
<th>Simulations</th>
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<th>Total</th>
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<tr>
<td>% of Total</td>
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<table>
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Chi-Square Tests

<table>
<thead>
<tr>
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<th>Value</th>
<th>df</th>
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</table>

a. 10 cells (66.7%) have expected count less than 5. The minimum expected count is .03.
Qst. 11 & 12 - Pearson-Chi Square and Contingency Tables
Discovery learning and Graduate completion rate
N = 61

Disc. Lrng. * Grad. Rate Crosstabulation

<table>
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<tr>
<th></th>
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<th>Total</th>
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<td>1.6%</td>
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Chi-Square Tests

<table>
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<tr>
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<th>Value</th>
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</table>

a. 10 cells (66.7%) have expected count less than 5. The minimum expected count is .03

Footnotes:

Graduate Completion categories –
1 = Less than one fourth
2 = One fourth to one half
3 = More than one half

Use of Discover Learning categories –
vi = Very little
s = Somewhat
m = Moderately
c = Considerably