ASSESSING THE VALUE OF A HIGH SCHOOL MENTORING PROGRAM

by

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DEDICATION

I dedicate this research to my family. My husband, Rich Downs, assisted me to complete this project by faithfully editing my work, encouraging me, and maintaining a sense of humor. I would also like to thank my son, Jesse Atkins, my brother, Bill Mackay, my aunt, Gertrude Hart, and my best friend, Dian Liles, for never giving up hope I would complete this research. At times, their belief in me was greater than my belief in myself. Thank you for keeping the faith!
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ABSTRACT

School-based mentoring programs have recently emerged as a potential method to improve pro-social behavior, academic success, resiliency, a sense of school connectedness, and reduce at-risk behaviors and drop-out probability among youth. This action research study surveyed 142 students to assess changes in student attitudes associated with implementing the first year of a sophomore mentoring program at a semi-urban high school in the northwestern United States. The mentoring program was called the Pathfinder program, a youth-to-youth group mentoring program developed and marketed by Varsity Gold Leadership, Inc. The extent of influence the Pathfinder program exerted over concepts related to school connectedness and academic motivation was compared to three other sources of influence (teachers, family, and friends). Results indicated friends were the most powerful source of influence, although family was quite influential, as well. In general, as academic motivation and perception of school climate improved, so did students’ estimation of the power exerted by all sources of influence. Although students reportedly enjoyed the Pathfinder program, it was least effective with students who were at most risk.
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CHAPTER ONE: INTRODUCTION

One measure of educational success, or the lack of it, is our nation’s dropout rate. Unfortunately, the dropout rate is high and rising (Barton, 2005). Barton (2005) states, “about a third of students are leaving high school without a diploma: One-Third of a Nation” (p. 3). He reports that only 69.9% of students graduated from high school in 2000 and the high school completion rate declined in all but seven states over the last decade. Chapman, Laird, and Kewal Ramani (2010) indicate the most recent data from the U.S. Department of Education National Center for Education Statistics (NCES) report a national graduation rate for 2007-2008 as 73.9%, with a corresponding dropout rate of 26.1%. However, due to differences in methods used to calculate graduation rates, some researchers report a much lower national graduation rate. The 2010 edition of Diplomas Count: Graduation by the Numbers published by Editorial Projects in Education reports a graduation rate of 68.8% for the class of 2007. Barton (2005) reports, “In high school graduation rates, the United States has now slipped to 10th place in the world” (p. 5). Using data provided by the U.S. Department of Education, Greene and Winters (2005) quote a graduation rate of 71% in 2002. Lehr, Johnson, Bremer, Cosio, and Thompson (2004) estimates every nine seconds in America, a student drops out. Greene and Winters (2005) note a large discrepancy in the graduation rate between whites and minority students and that “In the class of 2002, about 78% of white students graduated from high school with a regular diploma, compared to 56% of African-American and 52% of Hispanic students” (p. 2). The 2010 Diplomas Count report does not indicate much
progress in graduation rates from 2002 to 2010. After eight years, white youth graduation rates remained at 78%, and African-American and Latino graduation rates varied slightly at 54% and 56% respectively.

The dropout problem is so severe in some parts of the country that their schools have been labeled “dropout factories”. Balfanz, Bridgeland, Moore, and Fox (2010) define “dropout factory” schools as those in which the senior class is made up of 60% or fewer of the students who entered as freshman. These schools produce half of the nation’s dropouts annually. Although Balfanz et al. (2010) report a 13% decline in dropout factory schools from 2002 to 2008, there are still 1,700 dropout factory schools in our nation. The number of dropout factories varies by geographic region, with the South having as many as three times more dropout factories than any other region.

According to NCES (2009), the average 2007-2008 graduation rate in the Pacific Northwest, the region in which this study takes place (Alaska, Washington, Oregon, Idaho, and Montana), was 74.7%. In the Northwest, whites have a graduation rate of 80%. However, the graduation rates for some ethnic groups are much lower: Hispanics=64%, Blacks=59% and American Indians=64%.

Although Idaho reports a graduation rate better than that of the nation, it still has a significant problem with college entry, college retention, college graduation, and dropout rates. The Idaho State Department of Education (ISDE, 2011) reports Idaho is 49th in the nation in college entry, 50th in the nation in retention from freshman to sophomore year of college, and 44th in the nation in 6-year college graduation rate. ISDE report the
following percentages of dropouts for the state of Idaho during school year 2006-2007: Whites=2.28%, Blacks=2.45%. Hispanics=5.16%, and Native Americans=3.89%.

The school I researched, Northwest High School, is located in the Northwest School District. The district serves 25,000 students and has 3,900 employees, 1,700 of whom are certified. The Idaho State Department of Education, ISDE, reports the following dropout percentages for the Northwest School District during the 2007-2007 school year: Whites=2.43%, Blacks=3.33%, Hispanics=7.57%, and Native Americans=4.26%. However, in a report commissioned by the United Way of Treasure Valley, the dropout rate for 10 schools districts in the valley from 2004 to 2008 was reported at 11.4% (Gallant, 2010). The district I studied, Northwest school district had a four-year cumulative dropout rate of 10.7%.

Dropping out has serious consequences, both for the individual and society at large. Harlow (2003) reports that 75% of state prison inmates dropped out of high school and Catterall (1985) reports that dropouts are 3.5 times more likely to be incarcerated than graduates. According to Barton (2005), the earning power of dropouts has been in steady decline over the last thirty years. According to Amos (2008), dropouts are less likely to have health insurance, receive less medical care, and have worse health outcomes. Gibbons (2006) reports that dropping out has serious health consequences as dropouts have a life expectancy of 10 years less than that of graduates. Dropouts are more likely to receive public assistance and welfare/unemployment benefits than graduates, at a cost to the rest of society (Adair, 2001). The more education one has the less likely he or she is to be unemployed. Amos (2008) reports that 15% of dropouts are unemployed.
compared to 9.4% of high school graduates and 4.7% of college graduates. Amos (2008) also found that, over the course of a lifetime, a single dropout costs the nation about $260,000.

A number of factors contribute to the likelihood a student may drop out. Researchers have identified factors ranging from socioeconomic conditions, school practices, and individual student characteristics as contributing to the probability students’ dropout. Land and Letger (2002) found the following variables put students at-risk: being culturally diverse and living in poverty, having limited English proficiency, having parents with less than a high school education, and living with a single parent. Hammond, Linton, Smink, and Drew (2007) reviewed 44 studies to identify the risk factors associated with dropping out and identified which factors contributed to the likelihood of students discontinuing their education. The factors they identified are: students who have a learning disability or emotional disturbance, have a high number of work hours, belong to a high-risk peer group, engage in high-risk social behavior, are socially active outside of school, are over-age for grade, have low educational expectations, lack effort, do not participate in extracurricular activities, are aggressive, live in poverty, have parents with low educational attainment, have a large number of siblings, are not living with both natural parents, have siblings who have dropped out, and live in families that do not converse about school.

Tompkins and Deloney (1995) categorized at-risk factors into four groups: background characteristics, student behavior, school practices, and contextual variables. Bridgeland, Dilulio, and Morrison (2006) interviewed 467 ethnically and racially diverse
students, aged 16 to 24, who had dropped out of high school. They found that only 41% of these dropouts felt they had someone in school to talk to about personal problems. Altenbaugh, Engel, and Martin (1995) interviewed 100 students who dropped out of high school and were surprised at the importance of caring.

What appeared eloquent in earlier and later interview transcripts was the importance of caring, or more to the point, we observed a lack thereof. As one student declared: “Nobody gave a damn”. Here it should be noted that lack of caring was not attributed to the school environment and school personnel alone. Apparently, “nobody gave a damn” about these students outside the school – at home, in the neighborhood – as well as in school (p. 156).

Despite almost 30 years of educational reform, the dropout rate has changed very little. However, as my review of the literature will demonstrate, mentoring has been found to be an effective strategy in preventing dropouts. Assuming dropping out is at least partially a reflection of school alienation; we need to know what constitutes mentoring and how to use it as a vehicle to let students know they are cared for and about. Casey and Shore (2002) provide a working definition for our purposes, describing mentoring as simply “a learning partnership between two or more persons who wish to share and develop a mutual interest.” (p. 12)

My study involves an action research design study aimed at assessing the change in attitudes and the ability to reduce the potential for dropping out over the course of one school year (2007-2008) associated with implementing the first year of a sophomore-mentoring program at a large semi-urban high school. This study is needed because most
studies of mentoring are based on a one-to-one relationship between an adult and an at-risk youth in a community setting. This study is based on a peer mentoring model utilizing group mentoring in a school setting. Most studies of mentoring are based on results after one to three years, whereas this study is measuring potential change across a nine-month period. This study is also needed in that most studies of the effects of mentoring assess its’ value based on matches spending between one to four hours together every week. This study assesses the value of mentoring based on 45-55 minutes together each month. Furthermore, the study is needed because it focuses on a previously unresearched mentoring program, Pathfinders from Varsity Gold Leadership.

According to the Pathfinder Coordinator Handbook (2006), VG Leadership exists to give students the tools and resources to be successful. That’s it, plain and simple. We believe that when we communicate to young people that they are valued and significant, and combine that with intentional efforts to reflect that message, then curiosity is stirred, defenses are lowered, and openness is enhanced. The pursuit of this goal has led VG Leadership to the place where students spend the majority of their time- your school. VG Leadership began creating and offering programs to help schools invest in and build up lives of their students and to benefit from a system that is tried and true.

VG Leadership’s headquarters are located in Gilbert, Arizona and VG Leadership is a much larger entity called Varsity Gold, the country’s leading fund raising company. With the desire to make a significant impact on young people across the country, the owners of Varsity Gold have mobilized and enabled the team at VG
Leadership to design and polish a program that assists schools in the challenge to effectively connect students to their schools. (p. 7)

Varsity Gold declared bankruptcy on March 4, 2009. As of that date, VG Leadership and the Pathfinder program ceased to exist.

**Research Questions**

The specific research questions addressed by this study are:

1. To what extent does implementation of a sophomore mentoring program influence sophomore students’ perception over a period of one school year regarding school satisfaction, sense of belonging, academic achievement, and desire to graduate from high school?

2. If sophomore students’ perception, over a period of one school year, of school satisfaction, sense of belonging, motivation to be a good student, and desire to graduate does change, how does the mentoring program’s influence compare to other spheres of influence?

**Limitations**

It will not be possible to control for all the variables that influence the participants. Therefore, the study is limited by the following:

1. psychological factors such as intrinsic motivation and emotional factors of the participants;

2. physiological factors such as participants diet, rest, fatigue, or illness;
3. environmental factors such as temperature, humidity, weather, and time of day.

**Delimitations**

The ability to generalize the results of this study is limited by:

1. Students were included from one school in the Northwest and the findings are limited to those students only.
2. Only certain subgroups of the student population were studied and generalizations should not be made to other subgroups or populations.
3. The results of this study are based on a specific mentoring program and should not be generalized to other programs.
CHAPTER TWO: REVIEW OF LITERATURE

Mentoring Defined

Although the length, nature, frequency, and purpose of the relationship may vary, the concept of mentors and mentoring can be found in the literature from many fields. Such diverse interests as art and music, business, community advocacy programs, education and science have invested in the concept of mentoring. In the field of education; mentors have been used to support beginning administrators and teachers, first year graduate students, college freshmen, gifted and talented students, regular students entering a transition phase, at-risk students, and special needs students.

As previously mentioned, Homer’s *Odyssey* is often credited with the origin of the term mentor (Edlind & Haensly, 1985; Casey & Shore, 2002), in which Ulysses left his son, Telemachus, to the care and guidance of his wise friend, Mentor, during his 10 year journey. According to Freedman (1993), examples of mentoring in the United States date as far back to the late 1900’s when the Friendly Visiting Campaign enlisted hundreds of middle and upper class women to work with poor communities.

Nearly 3, 000 years after Homer’s *Odyssey*, the term mentor has evolved to describe a variety of relationships. Levinson (1978) described mentoring relationships as “a form of a love relationship” (p. 100) with two criteria: they usually last 2-3 years and the mentor is often 8-15 years older than the mentee. He subsequently (1980) described mentoring as a relationship between an individual with more experience and an
individual with less experience manifested through advisement, sponsorship, or friendship.

O’Neil (1981) broadened the definition of mentoring to include a mutually beneficial relationship between the mentor and mentee. In 1990, the federal government reauthorized the Juvenile Justice Delinquency Prevention Act (JJDPA) of 1972, which defines mentoring as a one-to-one relationship that provides guidance to at-risk youth (JJDPA, Part G). As amended in 1992, this act established a new mentoring program to combat the increase in juvenile crime. The goals of this program, The Juvenile Mentoring Program (JUMP), were reducing delinquency and gang participation, improving academic performance, and reducing school dropout rates.

Several years later, the California Mentor Resource (1996) provided the following definition of mentoring:

Mentoring is a one-to-one caring, supportive relationship or partnership between a mentor and a mentee based on trust. This relationship focuses on the needs of the individuals and encourages them to develop to their fullest potential based on their own vision of the future. (p. 3)

Most definitions of mentoring are based on a relationship with an adult and a younger person. Keating, Tomishima, Foster, and Alessandri (2002) state although youth mentoring programs differ, most emphasize the relationship between a “disadvantaged or troubled youngster and a caring adult.” (p. 1). Similarly, Jekielek, Moore, Hair, and Scarupa (2002) state:
Indeed, mentoring is often defined as a sustained relationship between a young person and an adult in which the adult provides the young person with support, guidance, and assistance. The very foundation of mentoring is the idea that if caring, concerned adults are available to young people, youth will be more likely to become successful adults themselves. (pp. 1-2)

In referring to school-based mentoring programs, Alkin and Ellet (2004) describe them as “a one-to-one teacher-student relationship occurring during regular school hours, using specific mentoring behaviors for the purposes of improving student academic success, increasing attendance, and improving the quality of student-child relationships.” (p. 24)

Several sources offer broader definitions of mentoring which are applicable to this project. Clinton (2002) states “mentoring is a relationship between two individuals of different ages that is formed to support the younger person through some aspect of development over a period of time.” (p. 1) As mentioned in Chapter One, Casey and Shore (2002) provide a working definition for our purposes, describing mentoring as simply “a learning partnership between two or more persons who wish to share and develop a mutual interest.” (p. 12)

Many organizations and authors offer a variety of definitions regarding mentoring. Several of them, also indicate what it is not. MENTOR: The National Mentoring Partnership has been a leading champion of youth mentoring in the United States since its’ inception in 1990. MENTOR works closely with state mentoring partnerships and more than 6,000 mentoring programs throughout the country, serving
more than three million children in fifty states. MENTOR promotes research, raises money, obtains grants, and tracks outcomes through its’ online database. MENTOR maintains the National Mentoring Institute, a clearinghouse of information and products about mentoring. MENTOR recognizes the value and importance of trust in a mentoring relationship. They believe mentors are good listeners and caring people who help young people recognize their assets. They also contend “mentors are not foster parents, therapists, parole officers, or cool peers.” (p. 1) According to Boyle (2006), Michael Garringer, of the Northwest Regional Education Laboratory, states it even more emphatically:

If a program is going to call itself a mentoring program, then mentoring better be the primary service they offer and their matches better be developmentally focused. You can work on grades, getting into college, staying off drugs and out of gangs…But if the relationship itself isn’t the primary focus of your agency’s work, then stop talking about yourself as a mentoring program. You’re doing something else using adults to help youth (and God bless ya), but it ain’t mentoring. (p. 4)

The U.S. Department of Education Mentoring Program’s Guide to Initial Training of Volunteers, Youth, and Parents: Preparing Participants for Mentoring (Cannata, Garringer, Taylor, & Arvala, 2006) suggests “A mentor is not a surrogate parent, a teacher or tutor (although they can help with schoolwork), a psychologist, an ATM, a savior, a playmate, a professional counselor, or a social worker” (p. 27) Finally, the University of Massachusetts library offers five criteria of what mentoring is not.
According to that source, (peer) mentoring is not “evaluative, hierarchical, judgmental, prescriptive, or a quick fix.” (p. 1).

Mentoring Programs: Purpose and Focus

Miller (2002) defined several types of mentoring in his book, *Mentoring Students and Young People* that are relevant to this study.

**Cross-age mentoring** is when mentors are drawn from a different age group to mentees.

**Group mentoring or small-group mentoring** is when the mentor is matched with two or more students (usually up to a maximum of between four and six).

**Peer mentoring** literally means mentoring by equals, but usually refers to people with the same status, i.e. teacher-teacher or student-student pairings.

**Peer Group mentoring** is a form of natural mentoring when groups of friends explore an issue together, often involving risk behavior.

**Site-based mentoring** is when the location of the meetings is within the educational institution, rather than community-based mentoring.

**Structured mentoring or planned mentoring or intentional mentoring** is when a third party organizes the mentoring relationship in contrast with natural mentoring.

**Student mentoring** is used as a generic phrase to cover all the forms of mentoring where young people in educational institutions are mentees.
School-led mentoring is where the school sets goals, targets, and processes that pairs are expected to follow.

Team mentoring refers to the situation when two or more people mentor a young person.

Transition mentoring describes mentoring programs that target young people during times of transition, e.g. transfer from primary to secondary school, from secondary school to college, or from school or university to employment. (pp. 270-273)

The Need for Mentoring

Mentoring has been directed toward a variety of youth, including: gifted and talented students, special needs students, at-risk students, and regular students in a transition phase. According to MENTOR’s publication The National Agenda for Action: How to Close America’s Mentoring Gap (Boisi, Saban, Schwartz, & Manza, 2006), 3 million young people benefit from mentoring. That organization indicates that’s a six-fold increase in the number of mentors from the early 1990’s to now. However, MENTOR estimates there are “an astounding 17.6 million young people - nearly half of the population of young people between 10 and 18 years of age -live in situations that put them at risk of not living up to their potential.” (p. 1) Yet, MENTOR indicates only approximately 1/5 (3 million) of those that need or want mentoring are in formal, high-quality mentoring programs. That leaves over 14 million young people in need of a mentor, a difference that MENTOR refers to as the “mentoring gap.” (p. 1)
General Colin L. Powell, founding chairperson of America’s Promise Alliance recognizes 15 million at-risk youth in need of mentoring, who they categorize at risk of dropping out of high school. According to that source, “That’s not a problem, that’s a crisis.” (p. 1) The Every Child, Every Promise: Turning Failure Into Action (2006) report indicates one-third of teens and 20% of younger children, approximately 8.5 million young people, lack quality relationships with their parents or other caring adults. Over 40% of youth ages 8-21 say they want more people in their lives to whom they can turn to for help. This study contends only 8% of young people ages 6 to 17 have a formal mentor. In failing to provide the children of our nation with the “Five Promises: caring adults, safe and constructive use of time, healthy start and healthy development, effective education for marketable skills and lifelong learning, and opportunities to make a difference through helping others” (p. 3), they contend “It is not our children who are failing, it is we who are failing them.” (p. 7)

The need for mentors is very acute among at-risk male students, specifically those of Hispanic and African-American ethnicity. Females are more likely to volunteer as mentors than males (Rhodes, 2002). Thus, there is a tremendous shortage of male mentors. This is particularly true for males of ethnic minorities, whose dropout rates far exceed those of whites.

Several organizations and distinguished people have rallied in support of mentoring. In 1996, Dr. Lori Salierno (Salierno, 1996) established Celebrate Life International (a faith-based program), with the “goal to positively impact young people by bringing them to an understanding of absolute truth through healthy mentoring
relationships.” (p. 1) She and her staff developed a character development program called Teach One to Lead One (T1L1). T1L1 has been implemented in 20 states, as well as Cape Town, Africa. It has been adapted to target students on probation through the Juvenile Court system, as well.

MENTOR created the National Agenda for Action: How to Close America’s Mentoring Gap (Boisi et. al., 2006) to bring attention to bear on this issue. They have developed a series of 21 action steps they hope to introduce to community leaders in every sector. MENTOR has joined forces with the Corporation for National and Community Service to co-facilitate a Mentoring Working Group whose goal is to recruit an additional 3 million mentoring relationships by 2010.

Even the Super Bowl is a venue for the promotion of mentoring. CBS, the NFL, and Big Brothers Big Sisters created a 15 second public service announcement to air on February 4th, 2007 during Super Bowl LCI. It featured Indianapolis Coach Tony Dungy and Chicago Bears Coach Lovie Smith, whose teams opposed each other in the game. However, their heartfelt message was powerful for Dungy, who considers Smith as his mentor and the two talk every week. Hopefully, this message struck home to some of the roughly 90 million viewers tuning in to the Super Bowl.

Susan Taylor, head of the National Cares Mentoring Movement (NCMM) has called to action every able Black adult to take under wing a vulnerable young person. Essence Cares and its’ partners (the National Urban League; 100 Black Men of America; The Links, Incorporated; and the YWCA) got a boost from Oprah Winfrey on May 31,
2007, when she urged 1,000,000 more volunteers to become mentors. Winfrey (Oprah’s Call to Action, 2008) donated 1 million dollars to undergird its’ mission.

The Federal Government has also responded to the need with strong support of mentoring. Congress allocated $100 million in funding to benefit mentoring organizations in 2008. This appropriations bill delivered $50 million for the Mentoring Children of Prisoners program and restored another $50 million to the Department of Education’s mentoring fund. In Proclamation 8212, (Woolley & Peters, 2007) President George W. Bush proclaimed January 2008 as National Mentoring Month. He stated,

To raise awareness of the challenges facing our youth and encourage adults to connect with young people through family, school, and community, First Lady Laura Bush is leading the Helping America’s Youth initiative. Through the USA Freedom Corps, we are connecting individuals with volunteer opportunities, including mentors who work with young people in schools and community organizations. By encouraging Americans to mentor, we are doing our part to see that more of America’s children grow into strong, confident, and successful adults. (p. 1)

Mentoring Research

The research on mentoring covers several different types of mentoring across a wide range of mentor-mentee relationships in a variety of settings. The initial research focuses on community-based programs featuring adults mentoring youth, usually aged 8 to 14, in relationships that meet two to four times a month for at least an hour, and last
over a year, because it is the most traditional type of mentoring. However, mentoring has branched out to include other types of mentoring, as well. Recent research has also been conducted on school-based (rather than community-based) programs, on group (rather than individual) relationships, and on peer (rather than adult-youth) pairings.

**Individual Pairings Using Adults in Community Settings**

The most well-known research study on mentoring was conducted by Tierney, Grossman, and Reach (1995, revised 2000) and studied 959 ten to sixteen year olds (93% of whom between 10 and 14 years of age) who applied to Big Brothers/Big Sisters (BBBS) in 1992 and 1993, ½ randomly assigned to the treatment group and ½ randomly assigned to a waiting list. Those matched met with their Big Brother (BB) or Big Sister (BS), all of whom were adults, for an average of 12 months, three times a month, for four hours each meeting. Their key findings were in three areas: antisocial activities, academic outcomes, and family relationships. In the area of antisocial activities; they found paired youth were 46% less likely to begin using drugs, 27% less likely to begin using alcohol, and 32% less likely to hit someone. In the area of academic outcomes; the researchers found among paired youth 3% earned higher grades, 4% were more confident about their school performance, 52% were less likely to skip school, and 37% were less likely to skip a class. In the area of family relationships; paired youth were 37% less likely to lie to a parent, 3% were more likely to trust a parent, and 2% believed family relationships had improved. However, this study did not find any statistical improvement in youth self-concept, or in the number of social/cultural activities in which the youth took part.
Morrow and Styles (1995) studied 82 matched pairs, supervised by eight agencies, in the BBBS program over a 9 month period. They researched pairs that had been meeting at least 4 months and not more than 18 months. The LB’s and LS’s were aged from 10-15 years of age, with a mean of 12. They found the matches naturally sorted themselves into two categories: prescriptive versus (vs.) developmental. While prescriptive relationships focused on transforming the youth’s values, attitudes, or behaviors through adult-directed activities, the developmental relationships focused on youth enjoyment and negotiated activities in which youth had a voice. They found while 50/54 developmental matches were considered successful, 20/28 of the prescriptive matches were either problematic or terminated. They also learned that successful matches led to perceived improvements in scholastic competence and fewer unexcused absences from school.

A study by Rhodes, Grossman, and Resch (2000) used longitudinal data from the Tierney and Grossman (2000) study of BBBS. It focused on the role improvements in perception of parental relationships played in the value that adolescents placed on school. They found “mentoring led to improvements in five of the six hypothesized mediator and outcome variables” (p. 1666). It led to improvement in parental relationships, school value, perceived school competence, grades, and attendance. They concluded mentoring can have a positive influence on adolescents’ cognitive and behavioral domains regarding school.

Johnson (1997) researched the Sponsor A Scholar program (SAS) in Philadelphia. Her evaluation sample of 180 included four cohorts of 9th, 10th, 11th, and 12th grade public
school students involved in the program in the fall of 1993. The students recruited to this program were middle-achieving students (mostly B’s and C’s, no D’s or F’s) who met the federal guidelines for free and reduced lunch. The mentors averaged 45 years old, predominately white, and did not have children living at home. Mentors committed to being involved with their mentees for five years, contacting them as often as once a week to as rarely as once a month. The experimental group was matched to a control by G.P.A., gender, and ethnicity. The main objective of the program was college enrollment. The SAS program provided mentoring, academic assistance, college application and financial aid help, a summer program, cultural enrichment, and six thousand dollars in financial aid to each student. Johnson (1997) found the SAS program had a significant positive impact on G.P.A. for 10th and 11th, but not for 12th, grade students. She also found SAS participants were significantly more likely to engage in college-preparation activities, and almost 3 times more likely to attend college. Her data did not reveal SAS participation had a significant impact on students’ self-esteem. She found that mentors who contacted or saw their mentees at least once a week, who knew the student’s family, and who had a good quality relationship with their mentee were significantly more likely to have higher G.P.A.’s in 10th and 11th grade, and to enroll in college.

Keating, Tomashimi, Foster, and Alessandri (2002) researched an intensive (at least 3 hours a week) mentoring program pairing 34 youth deemed at-risk for juvenile delinquency or mental illness with adults across a 6 to 12 month intervention period. The youth were aged 10 to 17, 65% of whom were male and 35% were female. They were compared to a non-intervention control group. They represented an ethnically diverse
population: 32% Caucasian, 24% African American, 37% Latino, 3% Asian, and 3% as “other.” They were assessed on several measures of well-being using a pre and post-test design: mothers and teachers completed the Child Behavior Checklist, and youth completed the Hopelessness Scale for Children, the Piers-Harris Self-Concept Scale, and the Self-Report Delinquency Scale. After 6 months of mentoring, there were significant changes on four of the seven measures in the intervention group. Intervention group members reported significantly fewer acts of self-reported delinquency, mothers reported significantly decreased internalizing behaviors, teachers reported significantly decreased externalizing behaviors at school, and problem behaviors at school were lower by one standard deviation. Levels of hopelessness and self-esteem were not significantly impacted.

**Individual Mentoring Using Primarily Adults in School-Based Settings**

A study by King, Vidourek, Davis, and McClellan (2002) assessed the effectiveness of the Healthy Kids Mentoring Program, a program that matched 28 at-risk 4th grade students with mentors across a 5 month period. Students were pre and post-tested for the program using a 55-item survey to measure their self-esteem; their school, peer, family connectedness; and their involvement in risky behavior. Students chosen for Healthy Kids met at least one of the following conditions; had self-esteem scores at least one standard deviation below the group mean, had engaged in two or more risky behaviors, had been sad or depressed for two consecutive weeks in the previous month, had abused alcohol, tobacco, or other drugs in the past 30 days, or had failed two or more
classes in the first quarter of 1999. Mentors varied in age. They met on school grounds twice a week for 1-1/2 hours each session. During each session, mentors devoted some time to the four components of the program: self-esteem enhancement, relationship building, goal setting, and academic assistance. Results indicated significant improvement in self-esteem, and connectedness to school, family, and peers. They were also significantly less likely to have engaged in bullying or fighting with a peer. Participants were significantly less likely to have felt depressed and significantly more likely to talk to an adult if they had a problem. Seventy-one percent of students in Healthy Kids improved academic achievement by at least one letter grade from first to fourth quarter of 1999.

Public/Private Ventures undertook a two-part study in which they surveyed 722 mentoring programs nationwide. In part one, Sipe and Roder (1999) discovered a growth surge in both community and site-based mentoring programs, the majority of which were located in schools. As a result, Herrera (1999) took a “look” at school based mentoring (SBM) in a qualitative study and concluded it has the potential to reach mentors and mentees not otherwise reached, provide useful information and supervision, provides ongoing support, and has the potential to make a difference. In part two of the previously mentioned study, Herrera, Sipe, McClanahan, Arbreton, & Pepper (2000) examined relationship development in community-based and school-based programs. They found both programs provided roughly the same amount of training and support. However, school-based mentors emphasized academic performance more and communicated more frequently with their mentee’s teachers, whereas community-based mentors engaged in
more social activities and communicated more closely with their mentee’s family. 
Herrera et.al. (2000) found school-based mentors are more likely to represent a wider age 
span and be more ethnically diverse than community-based mentors. School-based 
mentors are more likely to be supervised and spend less time with their mentees. While 
more community-based mentors (45%) reported feeling “very close” to their mentees 
than their school-based counterparts (32%), over 90% of both sets reported feeling 
“close” to their mentees. The authors also identified eight factors that are important 
components of both types of programs: social activities, academic support, amount of 
time spent together, shared decision-making, adequate pre-match training, adequate post-
match training and support, quality of the match, and age of the mentee. Interestingly, 
ethnic similarity and same gender was found to be less a factor than shared interests.
Also, mentors reported feeling closer to youth in elementary school than those in middle 
or high school.

Herrera (2004) took a “closer look” at school-based mentoring and compared 
three BBSS programs, located in different parts of the country, by surveying youth and 
teachers at the beginning and end of the year,, and mentors and case managers at the end 
of the year. The study focused on 212 youth, between grades three and five. Nearly 2/3’s 
were African-American, and 1/3 were white, 51% were female and 49% male, and 73% 
were from single-family homes. The youth were selected due to social difficulties 
(making friends, ability to trust, ability to communicate, relating to adults, family 
problems) or academic difficulties (disruptive behavior, fighting, discipline referrals, 
poor academic achievement). Among the mentors, 64% were female, 41% were married,
about half had children and three quarters were white. Most (70%) spent ½ to 1 hour a week with their mentees, with the rest spending 1 to 2 hours a week with their mentee. Half of the races were cross-race, with 11% cross-gender. Herrera (2004) compared results from matches meeting 6 months or less, 6 to 9 months, and over 9 months. She found significant improvement in ability to make friends and in social skills in matches who met 9 months or longer. She found slight improvements in the number of discipline referrals and the degree of “school liking” in the matches lasting over 9 months. She found little evidence that SBM improves attendance or academic achievement. Disconcertingly, Herrera (2004) found matches meeting 6 months or less worsened in ability to make friends, social skills, classroom behavior, and academic achievement.

Portwood, Ayers, Kinnison, Waris, and Wise (2005) evaluated YouthFriends, a SBM program serving 170 students in 3 states across 5 school districts, and pairing them with a caring adult for approximately an hour a week over a period of at least eight months. These students were compared to a matched control group. In the experimental group, 62% were in elementary school, 22% in middle school, and 13% in high school, while 52% were female and 48% were male. Of those students who reported ethnicity, 79% were white, 14% were African American, and 2% were Indian. Portwood et al. (2005) assessed YouthFriends in respect to their values, attitudes, and/or beliefs on eight areas: substance abuse, substance use, school attitude, school performance, school connectedness, attitude toward self, attitude toward adults, and attitude toward the future. Mentors were primarily female (80%) with an age range of 70 years and a mean of 46 years old. Portwood et al. (2005) used a pre and post-test design and compiled a
questionnaire from 13 sources to evaluate their outcome measures. They found YouthFriends students scores significantly higher than their matched controls on sense of school membership. However, no significant differences were detected in the other measured variables. Among the experimental group, further analysis revealed statistically significant improvements among those students designated at-risk, when compared to those not at-risk, in all areas except self-concept.

Herrera, Grossman, Kauh, Feldman, McMaken, and Jucovy, (2007) estimated BBSS was serving about 126,000 students nationwide in SBM programs. They undertook a study of 10 agencies in 10 different states, involving more than 70 schools in grades 4 through 9, and 1,139 students (half of whom were assigned to a control group). The youth were surveyed at 3 points: fall 2004, spring 2005, and winter 2005. Mentors were surveyed in the fall of 2005. Herrera et al. (2007) also interviewed teachers, principals, and program coordinators. Sixty-nine percent of the youth received free or reduced lunch. In terms of gender, 46% of them were male and 54% were female. They were ethnically diverse: 37% white, 23% Hispanic/Latino, 18% Black/African American, 6% Native American, 13% multiracial, 1% Asian/Pacific Islander, and 3% other. The youth were assessed on five areas of risk: economic status and stressful events, academic achievement, school behavior and attitudes, substance use and misconduct outside school, and relationships with teachers, parent, and peers. The mentors were primarily female (72%), white (77%) and 52% were adults and 48% were high school students. Most of the mentors met with mentees once a week for approximately an hour. Teachers reported significant improvement in academic performance, quality of work, number of
assignments turned in, and discipline referrals. Youth reported feeling more supported and cared for, more confident about school, and skipping less. Herrera et al. (2007) did not find any improvement in substance use, misconduct outside of school, self-esteem, or relationships with others. They also found improvements in the first year were hard to sustain at 15 months, with the exceptions of being less likely to skip school, more confident they would attend college, and maintaining a caring relationship with a non-parental adult.

Lampley and Johnson (2010) evaluated a mentoring program called LISTEN (Linking Individual Students To Educational Needs) involving 54 students in a middle school chosen based on meeting one or more of three criteria: failing one or more school years, obtaining 10 or more discipline referrals in a year, or having 10 or more unexcused absences in a year. They ranged from 11 to 15 years of age and 64% were male. No ethnicity was reported. The mentors were teachers, counselors, administrators, librarians, custodians, cafeteria workers, teaching assistants, and librarians. They met with their mentees twice a week, for an unspecified amount of time. Data was collected every six weeks on attendance rates, disciplines referrals, and G.P.A.’s. A significant improvement was found for all 3 measures: 94% of the students improved their grades, 94% had fewer discipline referrals, and 96% improved their attendance.

**Individual Mentoring Using Primarily Cross-Age Peers in School-Based Settings**

Dennison (2000) studied the Big Buddies program, a SBM program which matched 25 3rd and 4th graders with high school juniors and seniors from National Honor
Society. She brought together 3 agencies to solve their individual problems: a feeder school area experiencing higher than normal dropout rates, a long waiting list with few volunteers for the BBBS program, and few community collaboration opportunities for students in an undergraduate social work program. High school juniors and seniors were given an opportunity to register for a credit bearing course to mentor elementary students from the targeted dropout zone, while undergraduate students were given the chance to register for an independent study class in which they would train the high school mentors and evaluate the program’s effectiveness. No information on gender or ethnicity was provided. The Big Buddies were trained at their high schools every day for three weeks before they were matched, then Mondays, Wednesdays, and Fridays thereafter. They met with their Little Buddies at the elementary school Tuesday and Thursdays. The training sessions had 4 parts: warm-up, training topic, trouble-shooting, and closure. The mentoring sessions had 4 parts, as well: relationship building, tutoring, reinforcement activity, and discussion. The evaluation used a pre and post-test design. The Little Buddies were evaluated on 3 instruments designed to measure self-esteem, school attitude, and classroom behavior. The Big Buddies were evaluated on 2 instruments designed to measure self-esteem, and other-directedness. They did not find a statistically significant improvement in any area. However, concluding interviews with the Big Buddies revealed they all reported increased interest in volunteer work.

Karcher (2005) examined a SBM program using cross-aged peer mentors in 8th through 12th grade to mentor 33 4th and 5th graders. Their teachers deemed seventeen high-risk. A control group of 40 students was also established. In the experimental group,
63% were male and 36% were female. Among the control group, 50% were of each gender. They were all Caucasian. The mentors were recruited by announcements and the majority (61%) were sophomores or juniors. Ninety-four percent were Caucasian. Mentors and mentees self-selected each other after a six-hour orientation, with 90% of mentees receiving their first or second choice. Mentoring was conducted for two hours twice a week, at the middle school. Each session included an icebreaker, a connectedness activity, a snack, and a group game. Both sets of youth were rated by instruments designed to measure at-risk status, connectedness, self-esteem, and social and school competence. This study found significant gains in parental and school connectedness after six months of mentoring. Karcher (2005) found attendance was a significant influence on mentee’s social skills and self-esteem.

Herrera, Kauh, Cooney, Grossman, and McMaken (2007) report BBBS started using high school mentors as volunteers in 2001 and by 2007, were using nearly as many high school mentors as volunteers. They used the data collected from their previous study on school-based mentoring (Herrera et al., 2007) to assess how matches with high school students differed from those with adult volunteers, how the matches were beneficial both to high school mentors and their mentees, and the characteristics of programs using high school mentors successfully. Twenty-six percent of the “Bigs” were seniors, 46% were juniors, and 25% were freshman or sophomores. The demographics of the “Littles” are reported under the school-based mentoring section. They found high school mentors were more likely than adults to involve their Littles in decision-making: a correlate of match success. They also found high school Bigs had relationships with their Littles similar in
length and quality to those with adults. However, high school Bigs were less consistent than adults in attending meetings with their mentors. Although Littles matched with adult mentors performed better than their non-mentored peer in 12 of the 31 areas assessed, those matched with high school Bigs only improved in the area of social acceptance. They also found high school Bigs who had higher-quality training lasting at least two hours reported closer relationships with their Littles and were more likely to have longer relationships with their Littles.

Karcher (2009) compared changes in connectedness, attachment, and self-esteem, using three instruments designed for these purposes, between mentors from the previous study and a matched control group. Using a pre and post-test design, Karcher (2009) found that youth who participated in the cross-age mentoring program (CAMP) reported greater gains in school connectedness and self-esteem than a control group of their peers. In contrast, he found no difference in family-related measures between the two groups.

Group Mentoring in Primarily School-Based Settings

Herrera, Vang, and Gale (2002) examined three group mentoring programs and evaluated data previously collected from two earlier research studies (Sipe & Roder, 1999; Herrera et al., 2000). One of these programs, YouthFriends, was previously mentioned under the SBM section utilizing primarily adult mentors because it has been analyzed separately for its’ adult and group mentoring approaches. The effects of its’ group mentoring will be discussed here. The other two programs discussed by these authors are TEAMWORKS (which organized mentoring teams to work with middle
school students) and the Be-A-Friend program of BBBS (which assigned paid staff to
mentor small groups of students). The researchers visited each program, interviewed
program and school staff, conducted in-depth interviews with 52 mentees and 19
mentors, and did a focus group with an additional 12 mentees. The groups ranged in size
from 2 to 32 members, with an average of 10 mentees in a group. They met in a variety
of settings, most commonly in schools, for an average of 21 hours a month. They found
group mentoring attracts more low-income, more women and African-American, older
and less well educated, and more retirees than individual mentoring programs. They
found group mentoring focused on more youth from ethnic and racial minority groups,
particularly African-American. Herrera et al. (2002) noted the central goal of group
mentoring was to focus on improving social skills and strengthening peer relationships,
rather than fostering a close personal relationship between mentors and mentees. Unlike
community based programs in which parents are the primary referral source, group
mentoring participants are frequently referred by their teachers and recruited by their
peers. Although only twenty-one percent of youth and mentors reported feeling “very
close”, more than half (57%) of the mentees reported feeling ‘somewhat close” to their
mentors. The vast majority of youth did not indicate a preference for one-to-one
mentoring and seventy percent reported they considered their mentor “a friend”. Ninety-
two percent of youth did not report differential treatment by mentors toward mentees. As
reported earlier, shared decision-making and participation in social activities were
associated with fostering strong relationships. Interviews with mentors and youth
revealed perceived improvements in social skills, improved relationships with others, and improved academic performance among mentored youth.

Meloro (2005) studied a large semi-urban high school on the east coast that implemented a high school advisory program in the Fall of 2004. The school had 1580 students, 123 teachers, and a dropout rate of 21%. The goal of the advisory program was to provide a nurturing environment in which students could cultivate meaningful relationships with teachers and peers. Teachers served as mentors on an average ratio of 1 to 12. They used a co-mentoring model: two teachers in every advisory period. The advisory period met for 7 minutes a day, and for 33 minutes once every two weeks. A curriculum notebook, with relevant classroom materials, was developed with a theme for each month of the school year. The students provided demographic information and were surveyed on several instruments designed to measure sense of school belonging: Goodenow’s (1993) Psychological Sense of School Membership Scale (PSSMS), and Brown, Leigh, and Barton’s (2000) School Connection Scale. Meloro (2005) also surveyed their perception of the advisory program using a survey she developed: Advisory Program Survey. These scales are described in more detail in chapter 3. Teachers also provided demographic information and were assessed on their implementation of and attitude toward the advisory program. Seventy-two percent of the students and ninety-one of the teachers returned viable surveys. The student sample was 45% male and 55% female, 60% white, with a mean age of 15.6 years. Teachers were 43% male and 57% female, 96% white, with a mean of 14 years of teaching experience. Although 81% of the teachers reported enjoying the advisory some of the time, 59% also
considered it as a waste of time, sometimes. Fifty-nine percent of students never or rarely enjoying the advisory, and 75% considered it a waste of time, sometimes. Meloro (2005) found females enjoyed the advisory program more than males, and ethnic majority students had a higher sense of school belonging. Student perception of the mentor-mentee relationship and the opportunity to share their opinions were consistently strong predictors of school belonging. Skill-building and community activities were most highly associated with positive attitudes toward the advisory program.

Spanier (2006) investigated a program called the Transition Project in which 23 twelve-grade students, called Peer Leaders, mentored all 101 9th grade students of an eastern high school. They were compared to a control group from the previous 9th grade class who received a much less structured peer mentoring program. The Transition Project is a peer mentoring program developed by the Princeton Center for Leadership training. Faculty nominated seniors based on their ability to work with others, diversity of interests, self-confidence, and being a positive role model. The mentors received 2 days of training initially and met with faculty advisors once a week for 40 minutes throughout the year. Two co-mentors conducted nine monthly sessions, one a month, from September to May of 2005-2006 on a series of topics including one activity day, two family events, and five outreach activities which were coping with stress, communication, safety, change, and closure. Each session lasted 80 to 160 minutes, with the exception of the first, which lasted 5 hours. When compared to the control group, Spanier (2006) did not find any statistical difference in G.P.A., attendance, number of discipline referrals, mean PLSS scores, or participation in extracurricular activities.
However, they did find a significant difference in sense of school belonging and in program satisfaction when the experimental group was compared to the control group.

**Who Needs Mentoring**

Mentoring is frequently directed to youth who are categorized as being “at-risk.” Slavin and Madden (1989) described a student at-risk as one who is in danger of failing to complete his education with an adequate level of skills. According to Hepburn & White (1990), “The term at-risk is…particularly applied to young people whose prospects for becoming productive members of society look dim” (p. 5). Boyd (1993) states,

> Family background, personal characteristics of the child, the school context and the social behavior of children interact to create conditions that place children at risk of failing to achieve their academic potential, dropping out of school, and/or having limits placed on their ability to function as productive adults in society. (p. 3)

Several researchers categorize children as being at-risk according to the number, type and frequency of risk factors they are exposed to. Risk factors (Bogenschneider, 1996; Dryfoos, 1990; Small & Memmo, 2004) are individual or environmental hazards that are positively correlated with the occurrence of a problem behavior or negative developmental outcome.

MENTOR (MENTOR: Statistics & Research) is frequently questioned about how they arrived at the figure of 14.6 million youth in need of mentors. They arrived at that figure using a formula involving 2002 Census data, youth risk factors, and the number of
youth already participating in formal mentoring relationships. The 2002 Census indicated there were 35.2 million young people in the U.S. between the ages of 10 and 18. Next, they contacted Joy Dryfoos, author of *Adolescents at Risk* (1990), who identified a series of factors that put youth at-risk of failing to become successful adults. She categorized youth by their risk behaviors into 4 groups:

- **Very high risk** (10 percent of young people) – young people with multiple problem behaviors who commit serious offenses, drop out of school, use heavy drugs and have sex without contraception, etc.

- **High risk** (15 percent) – youth who participate in two or three problem behaviors but at a slightly lower frequency and with less deleterious consequences;

- **Moderate risk** (25 percent) – youth who tend to experiment in committing minor delinquent offenses, using substances occasionally but not hard drugs, have sexual intercourse with contraception, etc.; and

- **Low risk** (50 percent) – young people who do not commit any serious delinquent acts, do not abuse substances, and are not yet sexually active. (p. 1)

Finally, MENTOR used information from their poll, Mentoring in America 2005: A Snapshot of the Current State of Mentoring to calculate the number of youth in formal mentoring relationships. That figure subtracted by the number of youth in need of mentors produced the number of 14.6 million.

Many authors and organizations have attempted to define the factors that place our youth at-risk. Tompkins and Deloney (1995) have categorized these factors into four
groups: background characteristics, student behavior, school practices, and contextual variables.

**Background Characteristics**

Background characteristics refer to the factors related to a student’s personal background or family dynamics that contribute to increasing their risk. Tompkins and Deloney (1995) include the following variables as background characteristics which may contribute to a student being at-risk: low socioeconomic status (poverty), minority group status, limited English proficiency, single head of household, low educational attainment of parents, mobility, gender, and psychosocial factors.

According to Proctor and Delaker (2003) in the U.S. Census Bureau Report: Poverty in the United States: 2002, poverty increased from 11.7% in 2001 to 12.1% in 2002. That translates to 34.6 million people below the poverty threshold in 2002, a number 1.7 million higher than in 2001. The number of children in poverty increased to 12.1 million in 2002 from 11.7 million in 2001. The poverty rates for Whites and Asians in 2002 range between 10.0 to 10.3%. That percentage is markedly different than the poverty rates for Blacks (23.9%) and Hispanics (21.8%).

A RAND (derived from a contraction of research and development) review published in 2004b by Lara-Cinisomo, Pebley, Vaiana, and Maggio found that the most important factors associated with student academic achievement were socioeconomic ones including family income, neighborhood poverty, parental occupation status, and parental education levels. In a study of math achievement among high school students,
Berends, Lucas, Sullivan, and Briggs (RAND, 2005) found “improved socioeconomic conditions among blacks and Latinos correspond strongly to decreases in the mathematics test score gaps – both between blacks and whites and between Latinos and whites” (p. 1). A U.S. Department of Education Report “Promising Results, Continuing Challenges” (1999) confirms the RAND findings. They compared student’s math and reading achievement between high-poverty and low-poverty schools. Their findings were math achievement in high-poverty schools was more than two grade levels below that in low-poverty schools. Reading achievement in high-poverty schools was between three to four grade levels below that in low-poverty schools, confirming the link between poverty and academic achievement. They also reported differential expectations between high and low poverty schools, stating an A student in a high-poverty school would be a C student in a low-poverty school.

Ethnicity is often cited as a factor contributing to student’s at-risk status. Certainly, students who belong to an ethnic minority are more likely to drop out. Greene and Winters (2005) reported the graduation rates in 2002 for White students at 78%, for African American students at 56%, and for Hispanic students at 52%. Many researchers have studied the link between ethnicity and achievement. Jencks and Phillips (1998) indicate that black students score below 75% of white students on most standardized tests. In All Students Reaching the Top: Strategies for Closing Academic Achievement Gaps, Learning Point Associates (2004) reported grades 8 (1996) and 12 (2000) NAEP scores in science, mathematics, and reading. Black and Hispanic students performed significantly lower than white students in all three areas. They also reported Scholastic
Aptitude Test (SAT) scores for the years 1996 through 2003 for black and white students. The gap between black and white students on the SAT averages about 100 points, one standard deviation, in both verbal and mathematical areas.

Limited English proficiency is also a risk factor. Klein, Bugarin, Beltranena, and McArthur (2004) indicate there were no significant changes from 1979 to 1999 in English language ability among language minorities. They state “33% of language minorities spoke English with difficulty, compared with 34% in 1979.” (p. 2) Short and Fitzsimmons (2007) report, “Over 6 million American students are at risk of failure because they read and comprehend below – often considerably below – the basic levels needed for success in high school, postsecondary education, and the workforce.” (p. 5) Fry (2007) comments data from NEAP reveals English Language Learners (ELL) were considerably behind white students in their math and reading skills in 2005. According to Fry (2007),

The 2005 assessment indicated that 46% of ELL students nationwide achieved at the below basic level in math in grade 4. In reading, 73% of ELL fourth graders were below basic. Among white fourth-graders nationally, 11% were at the below basic level in math and 25% were below basic in reading. (p. 4)

Fry (2007) reports that the ELL gap widens with age. Whereas students in fourth grade were 35 points below their white counterparts, the gap had widened to 50 points by grade 8. Clearly, the ability to speak and comprehend English is positively correlated with academic success.
Another risk factor is being raised in a single parent household. Nord (1998) states, “Half of students get mostly A’s and enjoy school, according to their parents, when their fathers are highly involved in their schools, compared to about one-third of students when their fathers have low levels of involvement.” (p. 2) According to McLanahan and Sandefur (1994), children whose parents live apart are twice as likely to drop out of high school as those in two-parent homes. Furthermore, they report children whose parents live apart are one and a half times more likely to be idle as adults, and twice as likely to become single parents themselves. Shedlin (2004) indicates children do better in school when their fathers are involved in their education, regardless of whether they live with their children or not.

Low levels of educational attainment of parents, particularly that of mothers, are also a risk factor. Pallus (1989) explains, “Highly educated mothers provide children with educational resources that less-educated mothers cannot; their children do better in school and stay there longer than do the children of mothers who have not completed high school.” (p. 3) Nord (1998) analyzed data from the 1996 National Household Education Survey (NHES) and found,

Among children living in two-parent families, 31 percent have mothers who are highly involved in their schools if their mothers have less than a high school education, while 70 percent have highly involved mothers if their mothers have graduate or professional school experience. Similarly, 10 percent of children in two-parent families whose fathers have less than a high school education have
highly involved fathers, while 41 percent whose fathers have graduate or professional school experience have highly involved fathers. (p. 4)

NAEP Trend in Academic Progress (Campbell, Hombo, & Mazzeo, 2000) reports, “Across all ages and subject areas, students who report higher parental education levels tended to have higher assessment scores, on average.” (p. 46)

Mobility also effects graduation rate. Simpson and Fowler (1994) associate mobility with grade retention. A study by Haveman and Wolfe (1994) concluded mobility reduced the odds of graduating from high school. Swanson and Schneider (1999) found changing schools between grades 8 and 10 increased the chances that student would leave school before the end of 10th grade, compared to non-mobile students. Tucker, Marx, and Long (1998) found that even one residential move had a negative impact on school performance. Rumberger and Larson (1998), using data from the NHES, found that student mobility between grades 1 – 8 increased the odds of dropping out of high school, even after controlling for factors such as eighth grade achievement.

Psychosocial characteristics can also place children at risk. Both family and individual problems can effect achievement. It has been well-documented stress can effect performance negatively. Family crises such as divorce, death or unemployment reduce a child’s capacity to learn. Individual factors such as depression, attention deficit, learning disabilities, emotional impairment all may interfere with a student’s ability to graduate.
Gender may also influence student success. Grigg, Daane, Jin, & Campbell (2003) reported finding on the NAEP, females consistently outperformed their male counterparts on reading (2003) and writing (2002) at the 4th, 8th, and 12th grade levels. Although males outperform females in mathematics, the gap between the genders is narrowing. Kaufman, Alt, and Chapman (2000) found that female white and Hispanic students were more likely to complete high school. They also found females are more likely to take college-preparatory classes. Greene and Winters (2006) report female students (72%) graduate at a higher rate than male students (65%).

Student Behaviors

Tompkins and Delaney (1995) classified behavioral risk factors as participation in school; passive disengagement: inattentiveness, absenteeism and truancy; active disengagement: misbehavior, delinquency, and criminal behavior: substance abuse, low achievement, work, and fertility-related behavior.

Participation in school is frequently described as “school engagement.” Finn (1993) presents a model of school engagement in which he refers to “status risk factors” and “behavioral risk factors.” (p. 1) According to Finn (1993), “Status risk factors are demographic and historical characteristics…that are difficult or impossible to alter” (p.1) However, he states,

Behavioral risk factors are a set of behaviors that, if not manifested by a youngster, reduce the likelihood that successful school outcomes will be realized.

In the earliest grades, these include such basic behaviors as attending school,
arriving on time, paying attention to a teacher, and completing assigned work. These behaviors continue to be important throughout the grades….The full set of behaviors may be referred to as “participation” in school. A youngster is at risk for school failure if he or she does not sustain participation in school….In contrast to status risk factors, participation in school may be more easily modified… (p. 1)

Finn (1993) proposes four levels of engagement. Level one engagement requires students to be attentive, prepared, and responsive. Level two engagement requires students to take the initiative in seeking help, beginning dialogue with the teacher, and going beyond the basic requirements of the course. Level three engagement includes the students’ participation in extracurricular, social, and athletic events. Level four engagement involves participation in governance.

Passive disengagement in school is a risk factor that includes inattentiveness, absenteeism, and truancy (Finn, 1993). Students who drop out of high school cite boredom, irrelevance, lack of motivation, and lack of a challenging and engaging curriculum as reasons to leave (Bridgelan; Dululio; & Morison; 2006). According to Bridgeland et al. (2006), disengagement from school is a process. He found that students who dropped out felt progressively alienated from school. “Students described a pattern of refusing to wake up, missing school, skipping class, and taking three-hour lunches – and each absence made them less willing to go back” (p. 8).

The Free Dictionary Online defines the term inattentive as “showing a lack of attention or care, characterized by neglect and undue lack of concern.” The Mayo Clinic (Mayo Clinic, Attention deficit/hyperactivity in children) webpage regarding Attention...
Deficit/Hyperactivity Disorder (AD/HD) indicate signs and symptoms of inattention may include failure to pay close attention to details, making careless mistakes, trouble sustaining attention, difficulty following through, problems with organization, frequently losing needed items, easily distracted, and often forgetful. In assessing AD/HD: Inattentive Type, a widely-used behavior rating scale (Conners, 2000) characterize inattention as inability to concentrate, lacking perseverance, easily distracted, easily frustrated and having a short attention span with impulsive, aimless activity. The *Diagnostic and Statistical Manual of Mental Disorders: Fourth Edition (DSM-IV-R)*, published in 2000, describes three types of ADHD, one of which is Predominantly Inattentive Type. This subtype is used if six or more symptoms of inattention, but fewer than six symptoms of hyperactivity-impulsivity, have been present for 6 months or longer. These symptoms are:

*Inattention*

a) often fails to give close attention to details or makes careless mistakes in school work, work, or other activities

b) often has difficulty sustaining attention in tasks or play activities
c) often does not seem to listen when spoken to directly
d) often does not follow through on instructions and fails to finish schoolwork, chores, or duties in the workplace (not due to oppositional behavior or failure to understand directions)
e) often has difficulty organizing tasks and activities
f) often avoids, dislikes, or is reluctant to engage in tasks that require sustained 
   mental effort (such as schoolwork or homework)

g) often loses things necessary for tasks or activities (e.g., toys, school 
   assignments, pencils, books, or tools)

h) is often easily distracted by extraneous stimuli

i) is often forgetful in daily activities

j) Inattentiveness may also be characterized by a low commitment to school, 
   lack of effort, and a general dislike of school (Hammond, Linton, Smink, & 
   Drew, 2007). Rumberger and Larson (1998) found students with low levels of 
   commitment and low educational expectations in 8th grade were twice as 
   likely to drop out before the end of 10th grade. Gleason and Dynarski (2002) 
   supported the importance of educational expectations in finding twenty-five 
   percent of 9th grade students who expressed doubt about their ability to 
   graduate dropped out two to three years later. Lack of effort in school is 
   positively correlated with inattentiveness (Hammond et al., 2007). Kaufman, 
   Bradbury, and Owings (1992) found student who were not prepared for class 
   or those who reported doing no homework were 8 times more likely to drop 
   out than diligent students. A national study by Ekstrom, Goertz, Pollack, and 
   Rock (1986) reported not liking school as one of the two primary reasons 
   students leave school and Jordan, McPartland, and Lara (1999) reported it as 
   the number one reason students dropped out in a 1988 national survey.
Absenteeism and truancy are also characteristics of disengagement that are predictive of the likelihood of dropping out. A study by Balfanz and Herzog (2005) found that among the Philadelphia sixth graders they assessed, half with the following three criteria eventually left school: attended school less than 80 percent of the time, received a poor final grade from their teachers in behavioral conduct, and were failing either math or English. A follow-up study (Neild & Balfanz, 2006) of eighth graders found poor attendance and failing grade(s) in a core subject to be strong predictors of drop out. They state:

Of those 8th graders who attended school less than 80 percent of the time, 78 percent became high school dropouts. Of those 8th graders who failed mathematics and/or English, 77 percent dropped out of high school. Importantly, gender, race, age, and test scores did not have the strong predictive power of attendance and course failure (p. 42).

In a study of Chicago Public Schools, Allensworth and Easton (2005) found that 15 percent of freshman who miss a month or more of school each semester have less than a 10 percent chance of graduating. They also noted that students who missed one to two weeks of school each semester had less probability of graduating (63%) than those who missed less than one week (87%). In another study, Gleason and Dynarski (2002) found 27 percent of students with high absenteeism in their ninth grade year had dropped out two or three years later. A study of 467 students who dropped out of high school by Bridgeland et al. (2006) report that 43 percent said they missed too many days and could not catch up.
Truancy is also indicative of subsequent dropout. Kaufmann, Bradbury and Owings (1992) found students who skipped class once a week or more were nearly six times more likely to drop out than students who never cut class. Bridgeland et al. (2006) report:

Students described a pattern of refusing to wake up, missing school, skipping class, and taking three hour lunches- and each absence made them less willing to go back…In our survey, 59 to 65 percent of respondents missed class often the year they dropped out and 33 to 45 percent missed class often the year before they dropped out. Consistent with national data, absenteeism is the most common indicator of overall student engagement and a significant predictor of dropping out. (p. 8)

Bridgeland et al. (2006) also found 38 percent of the interviewed dropouts reported having too much freedom and not enough rules. “Nearly two–fifths or their respondents cited this as a factor in their decision to drop out of high school.” (p. 8)

Active disengagement from school (Finn, 1993) constitutes misbehavior, delinquency, and criminal behavior. Kaufmann et al. (1992) reported the chance of a student dropping out increased with the number of times they got in trouble. Their study indicated students sent to the office one or more times in their 8th grade year were three and a half times more likely to drop out prior to their 11th grade year than students who had never been referred to the office. According to Balfanz and Herzog (2005), behavior marks given by teachers in middle school were more positively correlated with drop out prediction than suspensions. They found students who earned a behavioral mark of
“unsatisfactory” in sixth grade had only a 25 percent chance of making to 12th grade on time.

Delinquency and criminal behavior also contribute to the probability of student dropout. An increase in juvenile delinquency and criminal behavior mirror an increase in the nation’s dropout rate. Snyder and Finnegan (1996) report gun homicides by juveniles have tripled since 1983 and the number of murdered juveniles increased 47% from 1980 to 1994. Snyder (1997) also reports juvenile arrests increased approximately 170% from 1984 to 1993. Voelkl, Welte, and Wieczorek (1999) examined the relationship between education and delinquency. They found skipping classes was related to higher rates of delinquent behavior (both minor and serious crimes) for all students. They also found African American, but not White, students with low grades or who had dropped out of school were associated with higher degrees of delinquency. They conclude, “Thus, for African American, but not for White adolescents, the decision to drop out of school was connected with involvement in delinquent activity.” (p. 83)

The American Youth Policy Forum (2006) reports seventy-five percent of state prison inmates are dropouts and that dropouts are more than 3 times as likely to be incarcerated than high school graduates. Since high school graduates are less likely to commit crimes than non-graduates, they estimate a one percent increase in the graduation rate would save the United States $1.4 billion dollars annually in reduced costs associated with crime.

Drug and alcohol abuse also appear to be positive correlates of student dropout. Bull, Salyer, Montgomery, and Hyle (1992) reported teachers and administrators cite
substance abuse among their greatest concerns as a major factor affecting drop out probability. A similar study by Bull, Montgomery, and McIntosh (1993) examined the perceptions of 1,300 school administrators and 441 school psychologists regarding the causes of school dropout. Using a 5-point Likert scale, they reported that substance abuse was perceived as the third most likely reason students drop out of high school.

Townsend, Fisher, and King (2007) undertook a systematic review of forty-six peer-reviewed articles published between 1990 and 2006 to examine the relationship between dropping out of high school and substance abuse. They found

Across all the cross-sectional studies reporting on their sample’s use of tobacco (cigarette smoking), dropouts were more likely to report current cigarette smoking than were in-school students …regardless of ethnicity …or high school graduates…. They were also more likely to do so at an earlier age and to be heavy smokers…. In-school students identified as being at risk for dropping out of school were also more likely to be to smoke cigarettes than were low-risk students… and more likely to be heavy cigarette smokers than normally performing in-school students…(p. 309).

Although these authors found a more tenuous relationship between other drug use and high school dropout, they discovered high school dropouts were more likely to use cigarettes and marijuana at higher rates than in-school students or graduates. They conclude

In summary, there is little doubt that dropouts use substances at elevated levels compared to their in-school peers and/or high school graduates. Evidence from
the longitudinal studies largely support the unique effect of cigarette and marijuana use on dropping out of school. However, the relationship between alcohol and other drug use and high school dropout is a complex one that may benefit from further research (p. 312).

Low achievement and grade retention appear to be two of the most significant predictors of later drop out. As early as 1993, Roderick (1993) found low grades in elementary school were predictive of high school dropout. Alexander, Entwistle, and Horsey (1997) found the most reliable predictor of dropout is whether a student repeated a grade in elementary or middle school. They found 64 percent of students who repeated a grade in elementary school and 63 percent who repeated a grade in middle school dropped out before graduating. Alexander, Entwistle and Kabbani (2001) found academic difficulty is one of the strongest predictors of drop out, whether assessed by grades, test scores, or course failure. Neild and Balfantz (2006) found of those 8th graders who failed math and/or English, 77 percent dropped out of high school. They also concluded more than half of Philadelphia’s dropouts were not promoted past 9th or 10th grade, yet were 17 years or older when they dropped out, indicating they had already had invested considerable time attempting to graduate. Allensworth and Easton (2005) concluded failing to be promoted to 10th grade, coupled with more than one F in core academic subjects, were factors that were 85 percent successful in determining students who would not graduate on time or would drop out.

Bridgeland et al. (2006), in *The Silent Epidemic*, a study commissioned by the Bill and Melinda Gates Foundation, found more than one third (35%) of the dropouts...
interviewed indicated school failure was among the top five reasons students left school prior to graduation. They report:

Thirty two percent of respondents were required to repeat a grade before dropping out and 29 percent expressed significant doubts that they could meet they could have met their high school’s requirements for graduation, even if they had put forth the necessary effort (p. 7).

A student’s decision and/or need to work appears to influence the likelihood of graduation. Barro and Kolstad (1987) concluded working more than 22 hours a week nearly doubled the likelihood a student would drop out of school. Goldschmidt and Wang (1999) concurred part-time work (> 20 hours a week) was a significant predictor of dropout. They concluded early work experience, particularly for middle school students, was particularly detrimental. They also determined employment was negatively associated with graduation, regardless of socioeconomic status. Of those students who had dropped out of high school and were interviewed in *The Silent Epidemic* (Bridgeland et al., 2006), 32% indicated they left to get a job.

Fertility-related behavior such as pregnancy can affect students’ ability to remain in school. Dropouts interviewed in the Bridgeland et al. (2006) report indicated 26% left school because they had become a parent. Nield and Balfantz (2006) found students who gave birth within four years of beginning high school represented 32.8 of their dropouts and 18.6 percent of the students they studied who were enrolled in school.
School Practices

Tompkins and Deloney (1995) indicate school practices influence dropout probability. Examples include specific teacher variables, student retention, course failure and poor grades, suspension and expulsion, and ability grouping. Goldschmidt and Wang (1999) researched how schools affect dropout behavior and concluded, “School factors can account for approximately two thirds of the differences in mean dropout rates, but they do a poor job of mediating specific student risk factors.” (p. 715)

The educational debate over which school variables affect student achievement has gone on for many years. In Equality of Educational Opportunity, widely known as The Coleman Report (Coleman, Campbell, Hobson, McPartland, Mood, Weinfeld & York, 1966) concluded, “Schools bring little influence to bear upon a child’s achievement that is independent of his background and general social context” (p. 325). However, subsequent research has contradicted Coleman’s (1966) finding. School attributes like teacher gender and race (Ehrenberg, Goldhaber, & Brewer, 1995; Goldhaber, Brewer, & Anderson, 1999; Hanushek, Kain, & Rivkin, 2002), teacher education and experience (Cavalluzzo, 2004; Darling-Hammond, 2000; Goldhaber, Brewer, & Anderson, 1999; Greenwald, Hedges, & Laine, 1996; Hanushek, 1997; Haycock, 2002; Walsh, 2001), teacher knowledge and enthusiasm for the subject (Monk & King-Rice, 1994; Brewer & Goldhaber, 1996), teacher salary (Kingdon & Teal, 2002), and class size (Nye, Konstantopoulos, & Hedges, 2004; Rockoff, 2003) may be relevant to student achievement. Much of the research concludes that teacher quality is the single most important factor influencing student achievement (Darling-Hammond, 2000; Goldhaber,
In fact, Darling-Hammond (2000) reported teacher-quality variables accounted for 67 to 87 percent of the total variance in student achievement. Hanushek et al. (2002) found that students assigned to highly effective teachers for three consecutive years performed 50 percentile points higher than comparable students assigned to least effective teachers for the same period of time. They concluded that teacher effectiveness is more influential than race, socioeconomic status, parental education, or any other factor in determining achievement. A study by Sanders and Rivers (1996) found that average student gains over one year in Tennessee were only 14% with an ineffective teacher compared to 53% with an effective teacher. A study of the Boston Public Schools restructuring project (Boston Public Schools, 1998) found that the top third of teachers produced as much as six times the learning growth as the bottom third of the teachers. Three studies conducted in Tennessee (Sanders & River, 1996; Sanders & Horn, 1998) and Texas (Jordan, Mendro, & Weeasinghe, 1997) suggest teachers can be effective with students at all levels of achievement and teacher impact can persist long after a student has left their classroom.

As I previously discussed; retention, course failure, and poor grades are positively associated with dropout probability. Several authors (Jordan et al., 1999; Lehr et al., 2004) distinguish between two sets of factors that increase the likelihood of dropping out: pull-out factors and push-out factors. Pull factors are those events or circumstances outside of school that influence the decision to drop out, whereas push factors are those circumstances intrinsic to the school itself (e.g., climate, structure, safety, rules, and
policies) that alienate students or encourage them to leave school prior to graduating. The Dignity in Schools Campaign (Dignity in Schools, 2006) states “Pushout happens when youth are removed (or remove themselves) from a regular school setting as a result of policies and practices that discourage them from remaining in classrooms and on track to receive a regular diploma” (p. 1).

Grade retention is considered a potential pushout factor for some researchers. Alexander, Entwistle, and Horsey (1997) found grade retention in elementary or middle school to be the most powerful predictor of high school dropout. Herlihy (2007) found ninth grade to be a critical year in that more students are held back in ninth grade than in any other year and a disproportionate number of those are more likely to drop out. A study by Haney (2000) found since the passage of the Texas Assessment of Academic Skills (TAAS), the minimum competency test adopted by the state of Texas, only 50% of the states’ minority students have been promoted from 9th to 10th grade. Grade retention rates are nearly twice as high for Black and Hispanic students as for White students, according to Haney (2000). He claims, “A convergence of evidence indicates that during the 1990’s, slightly less than 70% of students actually graduated from high school” (p. 2).

Some researchers have criticized the policy of “zero tolerance” (Ekstrom et al., 1986; Hammond et al., 2007; Kimball, 2005; Miller, Ross, & Sturgis, 2005; Skiba & Peterson, 1999; Sullivan, 2007) as a pushout procedure resulting in increased school suspensions and/or expulsions and contributing to the likelihood of subsequent dropout. Skiba & Peterson (1999) indicate, “The term “zero tolerance”- referring to policies that punish all offenses severely, no matter how minor – grew out of state and federal drug
enforcement policies in the 1980’s” (p. 2). As early as 1986, Ekstrom et al. (1986) found school suspension was a moderately strong predictor of a student dropping out. Ekstrom et al. (1986) reported greater than 30% of the sophomores they studied who dropped out of school had been suspended, a rate three times higher than those that remained in school. Darling-Hammond (2002) reports zero tolerance policies mandating automatic suspension impact dropout rates. Miller et al. (2005) accuses zero tolerance policies as resulting in a kind of “double jeopardy” in which students are punished jointly by the legal and school systems, resulting in consequences that may make it difficult for a student to remain in school.

Sullivan (2007) conducted interviews and focus groups with students, parents, teachers, community advocates and educational researchers in New York City and Los Angeles. She writes

Excessive and unfair disciplinary measures can set in motion a process that pushes targeted students out of school. Students and parents reported that some students who are labeled as troublemakers and/or are struggling academically are intentionally pushed out by being expelled, transferred, or counseled out by staff. Teachers acknowledged that some schools openly push students out as a strategy to reduce overcrowding and avoid the burden of helping students with special academic or behavioral needs. In other cases, schools subject students to repeated suspensions and removals without supportive services, contributing over time to alienation and misbehavior that can lead to pushout. (iii)
Schools have also been accused of disparate disciplinary measures based on race and socioeconomic status. In 1975, the Children’s Defense Fund studied data from nearly 3,000 school districts for the Office of Civil Rights (OCR) and found greater than two-thirds showed rates of black suspension that exceeded those of white students.

Kimball (2005) accuses many Texas schools of targeting Hispanic students for elimination from the public school system. One method he indicates used by the Texas school system is to hire “bouncers” as assistant principals, whose job it is to see only the best and brightest students remain in school to take the state mandated achievement test, used to determine a school’s rating and merit pay. He says, “As an assistant principal in a Houston High School, I personally observed these bouncers at work. They would walk the halls and tell students to go to the office and withdraw” (p. 9).

Ability grouping, or tracking, has been a controversial practice in education for more than 70 years. According to Hanushek and Woessman (2005),

The arguments about school placement policies – variously called tracking, streaming, or ability grouping – often rest on the perceived trade-off between equity and efficiency. The central argument behind tracking is that homogeneous classrooms permit a focused classroom and appropriately paced instruction that leads to maximum learning by all students. In such a situation, the teacher does not have to worry about boring the fastest learners or losing the slowest learners. The arguments for ungrouped classrooms largely revolve around concerns that the
lower groups will be systematically disadvantaged by slower learning environments that leave them far behind the skills of those in the upper groups. (p. 1)

Slavin (1990) believes most of the research on tracking has followed two directions: one that compared the achievement of grouped to that of ungrouped students and another that compared the achievement of students in the high, middle and low groups to one another. Whereas most researchers have found little difference in achievement between grouped and ungrouped students (Findley & Bryan, 1971; Good & Marshall, 1984; Kulik & Kulik, 1984), they have found significant differences in achievement between students placed in the highest track and those placed in the lowest track (Findley & Bryan, 1971; Gamoran & Mare, 1989). Hanushek and Woessman (2005) used six student assessments in 26 comparisons between countries to analyze the difference in achievement between grouped and ungrouped students. They found early tracking has a particularly detrimental effect on educational achievement and increases the inequity between groups. Using data from the 1980 High School and Beyond survey, Gamoran and Mare (1989) concluded students in the highest track made significant achievement growth over those in the lowest track and were much more likely to graduate from high school.
Contextual Variables

Tompkins and Deloney (1995) also identify contextual variables as influencing dropout probability. Contextual variables include rural school characteristics, school size, school norms, rural community characteristics, and community norms.

According to Tompkins and Deloney (1995), rural schools have higher per-pupil costs and fewer resources than urban schools. Mollenkopf (2009) contends the remote and isolated location, limited cultural opportunities, and low salaries among rural schools make it difficult for them to recruit and retain highly qualified teachers. According to a 2007 report by Provasnik, Kewal Ramani, Coleman, Gilbertson, Herring, and Xie submitted to The National Center for Education Statistics (NCES), 45% of students attending school in remote rural areas are educated in a moderate or high poverty school. Provasnik et. al. (2007) reports 38% of these students qualify for free or reduced lunch. Among ethnic minority students in rural areas, eighty-seven percent of African American and seventy-nine percent of American Indian children live in poverty. Although Provasnik et al. (2007) found rural students outperform urban students at grades 4, 8, and 12 on the reading, math, and science subtests of the National Assessment of Educational Progress (NAEP), Zhang’s (2008) report to the Center on Education Policy indicates 68% of rural districts report achievement gaps in language arts and math between students with and without learning disabilities and 50% report gaps between low-income and other students. Bryant (2010) suggests improved educational opportunity and cost effectiveness have been the two driving forces behind the effort to consolidate rural schools. In fact,
Duncombe and Yinger (2001) report an almost 90% drop in the number of school districts since 1938.

Rural school community characteristics may also contribute to placing a student at-risk. Tompkins and Deloney (1995) report rural communities are economically dependent on fewer resources, have fewer social services, and declining populations. Bryant (2010) reports rural schools budgets are based on 9% federal funding, whereas urban schools are based on 11% federal funding, making it harder to compete at the same level as urban schools. He also contends low proficiency test scores make rural schools highly vulnerable to sanctions and take-overs.

Another contextual variable Tompkins and Deloney (1995) address is school size. Cantor and Wright (2002) prepared a report to the U.S. Department of Education on School Crime Patterns in U.S. Public Schools comparing small schools to big schools and found small schools to be safer. Cantor and Wright (2002) classified schools into four categories: no Crime, Isolated Crime, Moderate Crime, and Violent Crime. The Violent Crime group had the highest crime rate, with the highest rates of violent crime, non-weapon attacks, and property crimes. They found schools in the Violent Crime group were larger (averaging 1060 students), located in urban areas, (28%) and have more minority students (averaging 40%). In contrast, schools in the No Crime group were much smaller (averaging 370 students), more rural (62%), and had a lower percentage of minority students (12%). Studies of small schools also report improved student achievement, attendance, and higher graduation rates. Darling-Hammond (2002) conducted a seven-year study of the Coalition Campus Schools Project in New York
City, which replaced one large, failing, comprehensive high school with 5 small schools. The newly created small schools produced better attendance rates (from an average of 72% to 86%), fewer suspension rates (from 6% to 1%), improved performance in all three sections of the Regents exam (74% to 94 % in reading, 66% to 85% in writing, and 75% to 79% in math), higher graduation rates (70% to 86%), and improved college entrance rates. Bloom, Thompsom, and Untermann with Herlihy and Payne (2010) reported on the results from New York City’s 2002 closure of more than 20 underperforming high schools and replacing them with over 200 “small schools of choice” (SSC’s). Bloom et al. (2010) found SSC students were more likely to attain more credits, less likely to fail classes, and more likely to attend school than their non-SSC counterparts. They found SSC’s increase graduation rates by 6.8 %, a difference of approximately one-third the size of the achievement gap between white and non-white students in New York City. Balfanz, Bridgeland, Moore, and Fox (2010) credited the reduction in school size as partially responsible for the U.S. graduation rate improvement from 72% to 75% from 2001 to 2008, with 29 states increasing their graduation rates, with 15% fewer students enrolled in “dropout factory” high schools.

Tompkins and Deloney (1995) also comment on the influence school and community norms play in a students’ at-risk status. Just as I previously discussed school practices and policies that pushout at-risk students, there are school norms, practices, and policies that pull in and retain at-risk students. These characteristics have been identified in the research for effective schools. Cawelti and Protheroe (2001) identified four school districts serving significant numbers of low-income students who have made significant
progress in narrowing the achievement gap on standardized test scores. The researchers visited each to interview teachers, principals, and administrators. They discovered all districts in the study shared the following characteristics: leaders who had shared beliefs about learning, held high expectations, and were results-focused; restructured to improve accountability; invested in curriculum-alignment, facilitated practices allowing teachers to engage in formative assessment, tutoring, and practice; sustained research-based practices, and focused on test content. Kitchen, DePree, Celedon-Pattichis, and Brinkerhoff (2004) examined nine high achieving schools serving low-income communities with more than 50% of their students on free or reduced lunch. These schools were selected for inclusion in this study because they consistently demonstrated significant academic success, particularly in math, on a variety of standardized assessments. The University of New Mexico team visited each school twice, interviewing students, teachers, and administrators. They identified seven characteristics of highly effective schools: high expectations, supplemental support, a well-defined sense of purpose, faculty collaboration and support, explicit focus on test preparation, widely available teaching resources, and access to opportunities for professional development.

Shannon and Bylsma (2007) published their 2nd edition of “Nine Characteristics of High-Performing Schools”, based on a research review they conducted for the Washington State Office of Superintendent of Public Instruction (OSPI) of over 20 studies in 2002 of schools that performed better than their demographic characteristics would predict. In 2006, OSPI asked a number of experts for their feedback and comments on the original document. The 2nd edition (Shannon & Bylsma, 2007) reiterates the original nine
characteristics and includes another set of 10 concepts to consider for school improvement. The original “nine characteristics’ are a clear and focused vision, high standards and expectations for all students, effective school leadership, high levels of collaboration and communication, curriculum, instruction, and assessments aligned with state standards, frequent monitoring of learning and teaching, focused professional development, a supportive learning environment, and high levels of parent and community involvement. The ten additional concepts to be considered include effective processes for school improvement, expanded perspectives on effective leadership, relational trust, quality instruction, grading, and monitoring, professional learning communities, cultural competence and culturally responsive teaching, family and community engagement in schools, high school improvement, district improvement, and need-based allocation of resources. The National Middle School Association (This We Believe: Essential Attributes and Characteristics of Successful Schools, 2010) lists four essential attributes of effective education and 16 characteristics of effective schools organized by three categories. The four attributes of effective education are that it be developmentally responsive, challenging, empowering, and equitable. In the area of curriculum, instruction, and assessment, NMSA states educators should value adolescents, promote active engagement, have a challenging curriculum, and employ multiple teaching and learning strategies. In the area of learning and organization, NMSA believes shared vision is important, leaders need to be committed and informed, leaders need to demonstrate courage and collaboration, professional development should reflect best practices, and organizational structure should foster purposeful learning and
meaningful relationships. In the area of culture and community, NMSA believes the school should be inviting, safe, inclusive, and supportive of all, every student’s learning should be guided by an adult advocate, comprehensive guidance and support should be provided, health and wellness are supported, and the school should actively involve families in the education of their children.

Tompkins and Deloney (1995) indicate students who have minimal community support are more likely to be at-risk than students who have high degrees of community support. Several instruments designed to measure adolescent well-being are being used by communities to inform and direct their community youth development initiatives. Whitlock and Hamilton (2003) described and compared three surveys designed to measure adolescent health: the Communities That Care (CTC) Youth Survey, the Search Institutes Profiles of Student Life: Attitudes and Behaviors and the Teen Assessment Project (TAP). They concluded these instruments are useful in guiding the community’s effort to promote a healthier environment for youth and noted the importance of creating a committee of committed stakeholders to carry the initiatives out. Of the organizations interested in adolescent health, the Search Institute is widely known. The Search Institute is a non-profit, nonsectarian research organization operating since 1990, under the direction of Peter Benson, whose mission is to advance the well being of children and adolescents by generating, synthesizing, and communicating knowledge and information to state and national organizations, as well as to community leaders who advocate for youth. Benson, Leffert, Scales, & Blyth (1998) have developed and researched a framework of 40 developmental assets which consist of positive experiences,
relationships, opportunities, and personal qualities that promote healthy, caring, and responsible youth. These developmental assets are broken into eight areas: support, empowerment, boundaries and expectations, constructive use or time, commitment to learning, positive values, social competencies, and positive identity. They can be grouped into 20 external assets (environmental, contextual, and relational features of socializing systems) and 20 internal assets (skills, competencies, and commitments). Based on surveys of 150,000 6th to 12th grade students in 2003, the Search Institute found youth with the most assets (31 to 40) are the least likely to engage in four areas of high risk behavior: alcohol use (3%), violence (6%), illicit drug use (1%) and sexual activity (3%) and youth with the least assets (0 to 10) are the most likely to engage in high risk behavior: alcohol use (45%), violence (62%), illicit drug use (38%), and sexual activity (34%). In addition to protecting youth from risky behavior, The Search Institute was also able to show having more assets contributed to the development of positive characteristics. Students with the most assets (31 to 40) were more likely to demonstrate leadership (87%), maintain good health (88%), value diversity (89%), and succeed in school (54%), while youth with the least assets were less likely to demonstrate leadership (45%), maintain good health (27%), value diversity (39%) and succeed in school (9%). Their research indicates the average young person experienced only 18.6 of the 40 assets. The Search Institutes suggests 31 assets is a worthy benchmark for experiencing the benefits most strongly and a goal communities should strive for. Scales, Benson, Roehlkepartain, Hintz, Sullivan, and Mannes (2001) surveyed 1,425 U.S. adults to determine the degree of importance they ascribed to 19 positive asset-building actions
and the degree to which they actively engaged with young people outside their own families. They found only a minority of adults are motivated to engage in interaction with children other than their own. They report a large gap between what adults consider important and what they actually do to construct positive, intentional relationships with youth. Scales et al. found although 75% of the adults thought it was important to have more than casual conversations with youth, only 50% thought it was important to know the names of children in their neighborhood. Thirty-five percent of the adults indicated they felt responsible for helping ensure the well being of children in their neighborhoods. Although the majority said they thought it was important to tell parents when their children did something right (65%) or wrong (62%), only 22% and 33%, respectively, did either. Less than half of the adults thought involving children in community improvement activities were important, and only 13% felt it was important to give them advice.

Benson et al. (1998) describe what attributes should be evident in a healthy community. The authors believe all residents should build caring relationships with youth, neighborhoods develop initiatives to name, know, and engage children constructively; families make asset development their top priority; religious institutions promote intergenerational relationships, positive values, conduct parent education, provide structured opportunities for youth, and be of service to the community; schools cultivate caring environments, nurture values, strengthen extracurricular activities, and encourage parental involvement; youth organizations provide a continuum of opportunities to engage youth; businesses employing teens provide support, boundaries, and family-friendly policies, and city government makes asset development a top
priority. The Search Institute provides six principles for asset-building communities: assets are nurtured in all young people, relationships are key, everyone contributes to the vision, asset building never stops, the community is filled with consistent messages, and duplication and repetition are valued.
CHAPTER THREE: METHODOLOGY

The Pathfinder Program

My study involved an action research design study aimed at assessing the change in attitudes over the course of one school year (2007-2008) associated with implementing the first year of a sophomore-mentoring program at a large semi-urban high school. The principal and I met with two representatives of Varsity Gold Leadership, sponsor of the mentoring program (Pathfinders), in the spring of 2007. After further discussion and clarification, funding for this program was sought and obtained through the district’s counseling department.

The sequence of events that led to the first year of implementation is described below. Staff members were asked to choose six topics that they felt were most relevant to maximize school climate at the high school. Among the choices of topics and lesson plans were Bullying, Building Others Up, Conflict Management, Diversity, Goal Setting, Gossip, Honesty, Including Others, Listening, Respect, and Tolerance, The topics and lesson plans chosen were Including Others (Appendix 7), Gossip (Appendix 8), Diversity (Appendix 9), Honesty (Appendix 10), Conflict Management (Appendix 11), and Respect (Appendix 12). Then, staff input was solicited regarding where and when to implement the activities. It was decided to conduct the activities in the English 10 classrooms once a month, for 45-55 minutes at a time. Interested staff members were encouraged to be on the implementation committee and seven staff, in addition to me, volunteered. A three-hour staff training session was held in August and four committees
were formed. I was named project coordinator and two staff represented each committee. The committees were Networking (responsible for staff communication), Community Building (responsible for advertising, organizing, and conducting special events), Communication (responsible for mentor communication) and Path Lookouts (responsible for making sure no kids “fall between the cracks”).

**Pathfinder Mentors**

Teachers were asked to nominate potential Pathfinders in the spring based on a set of characteristics we thought would enhance the success of this program (Appendix 1). Letters were then sent to the nominated students explaining the program and enclosing an application/parent permission form for them to submit to me, if interested (Appendix 2). Interested applicants were sent a letter of congratulations with an explanation of the mandatory training session to be held in August (Appendix 3). They were also sent a subsequent reminder in mid-August of that training. During the third week of August, selected students attended a 5-hour mentor training session, accompanied by me. They also agreed to attend six subsequent 1 hour training sessions each month and to conduct the activities in which they were trained in the same English 10 classroom (classroom connection) with the same set of 5-7 sophomores each month, within 3 days of having been trained themselves. Students absent from the initial training attended a make-up training conducted by me, prior to the classroom connection day. An attempt was made to replace students who missed both the initial and make-up training with students who had been trained.
Sophomore Mentees

The principal addressed the sophomore parents through newsletters and at the sophomore orientation. He explained the Pathfinder program in detail to them. He described the program to the sophomores at the Sophomore Orientation, as well. The English 10 teachers also discussed the goals and objectives of the program with their students prior to the first classroom connection. Prior consent/assent was obtained from parents to survey each sophomore student (April 2008) regarding their perceptions of high school and to collect feedback regarding the Pathfinder program (Appendix 4). After implementation of the program, the survey was given to their students via their English 10 teachers. Only students whose parents provided their assent/consent were included in the research.

Survey Development

The survey was developed to assess the Pathfinder program’s impact on a change in perception over a one-year period and to compare its effect with other spheres of influence impacting a student’s perception. A Likert scale was used to measure the degree to which the respondents agreed or disagreed with each statement presented.

Mentoring programs have been assessed in a variety of ways. As the literature review from Chapter Two presented, many studies report improvements on a variety of school variables. However, as a consequence of my review of the literature, only four surveys directly influenced the development of the survey instrument used in this study: Goodenow’s (1993) Psychological Sense of School Membership Scale (PSSM)
(Appendix 13), Brown, Leigh, and Barton’s (2000) School Connection Scale (Appendix 14), Meloro’s (2000) Advisory Program Survey (Appendix 15), and Spanier’s (2006) (Appendix 16) Peer Leadership Satisfactions Survey (PLSS). Goodenow’s (1993) scale used a Likert format with a 1 to 5 range across an 18 item survey to measure adolescents’ perceived sense of belonging in the school. The construct validity of the PSSM (Goodenow, 1993) has been demonstrated via a series of comparisons and correlations including school enrollment, attendance, location, status, motivations and grades. Hagborg (1998) found correlations in the areas of self-concept, grades, homework time, social-emotional distress, and student perceptions of school climate. Brown, Leigh, and Barton’s School Connection Scale (SCS) (2000) is a 16 item scale designed to measure four aspects of school connection: commitment, power, belief, and belongingness. Brown, Leigh, and Barton (2000) assessed the reliability and validity of the SCS, and found a Cronbach coefficient alpha of .86. A factor analysis tested the internal validity using Kaiser-Guttman normalization, which converged on three factors with sic iterations, explaining 49.5% of the variance. Meloro’s (2005) Advisory Program Survey used a Likert scale with a 1 to 5 range to measure high school students’ response to the implementation of an advisory program. Spanier (2006) developed a 10 item Likert scale using a range of 1 to 5 to assess students’ perceived satisfaction and effectiveness of a peer leadership program (PLSS). I did not find any research validating Meloro’s or Spanier’s scales.

The first attempt to develop my survey instrument (Appendix 5) was loosely based on some of the items from three of the four scales. Specifically, the items that were
influential to the development of my survey were numbers 6, 13, 14, 16, 17 & 18 from the PSSM (Appendix 13), numbers 7, 14, &16 from The School Connection Scale (Appendix 14), and numbers 3, 11, 13, 16, 21, 23, 24, 26, 27, & 28 from the Peer leadership Satisfaction Survey (Appendix 16). However, after meeting with my committee, it was refined to reflect how the Pathfinder program compared with other spheres of influence affecting how student’s felt about school (Appendix 6). My survey has not been validated.

**Role of the Researcher**

I was the coordinator of the Pathfinder mentoring program at a large semi-urban high school in which I work. As such, I met with the agency we contracted with (Varsity Gold Leadership), elicited teacher referrals, sent an application and consent form to nominated students and their parents, notified chosen students, participated in a 3 hour staff training session, and organized and participated in an 5 hour initial training session with the mentors. I paired each mentor with his or her group of sophomore mentees (usually 5-7 in a group). Subsequently, I participated in each of two monthly training sessions (45 to 55 minutes each), conducted a make-up session each month for absent mentors, and co-taught, with the appointed Pathfinder mentors, the monthly Pathfinder activities in 2 special education and 2 modified English 10 classes, as well as troubleshooting, on each training day.
I was responsible for designing the survey and instructing the English 10 teachers how to deliver and collect the survey. I was responsible for collecting and analyzing the data generated by it.

**Demographic Characteristics**

**The Population**

The population from which the sample was drawn consisted of every sophomore attending Northwest High School in the spring of 2008. The program was aimed at the entire sophomore class because we hoped to ease their transition to Northwest High School from junior high, make them feel welcome, create unity among sophomores from different junior highs, set a tone for the school climate we are trying to cultivate at NHS, reduce competition between grade levels, and promote vertical integration between all grades. The class consisted of 451 students, 59% (n=266) of whom were male and 41% (n=185) of whom were female. Eighty-three percent (n=374) of the class was of Caucasian descent and 17% (n=78) was an ethnicity other than Caucasian. Specifically, Native Hawaiian or other Pacific Islanders were .04% (n=2), American Indians or Alaskan natives were 1% (n=6), Black or African Americans were 3% (n=12), Asians were 4% (n=20), and Hispanics or Latinos were 8% (n=38) of the population. Thirty-eight percent (n=171) of the class qualified for free or reduced lunch and 62% (n=280) did not. The mean weighted Grade Point Average (G.P.A.) attained by this class was a 3.095 and the mean unweighted G.P.A. was a 3.050. Special education students
constituted 8% (n=36) of the class, and Limited English Proficiency (L.E.P.) students constituted 6% (n=27) of the class.

The Pathfinder Mentors

Teachers were asked to nominate potential Pathfinders in the spring of 2006, based on a set of characteristics we thought would enhance the success of this program (Appendix 1). Ultimately, 89 students were trained and chosen to be Pathfinder mentors. Seventy percent (n=62) of the mentors were seniors and 30% (n=27) were juniors. Twenty percent (n=18) of the mentors were male and eighty percent (n=71) were females. Eighty-five percent (n=76) of the Pathfinders were of Caucasian descent and 15% (n=13) were not. Specifically, Native Hawaiian or other Pacific Islanders were 0% (n=0), American Indians or Alaskan natives were 1% (n=1), Black or African Americans were 4% (n=4), Asians were 3% (n=3), and Hispanics or Latinos were 5% (n=5) of the population. Sixteen percent (n=14) of the Pathfinders qualified for free or reduced lunch and 84% (n=75) did not. The mean weighted G.P.A. of this group was a 3.54 and the mean unweighted G.P.A. was a 3.32. None of the mentors were special education students, nor were any of them L.E.P students.

The Sample of Respondents

The sample of respondents consisted of 142 members of the 2008 sophomore class who returned their surveys, 45% (n=63) of whom were male and 55% (n=78) of whom were female. That constitutes a response rate of 31% (141/451). One hundred
percent of the respondents were of Caucasian descent. Nineteen percent (n=27) of this sample qualified for free or reduced lunch and 81% (n=114) did not. The mean weighted G.P.A. of this group was a 3.373 and the mean unweighted G.P.A. was a 3.350. Sixty-seven percent (95/142) were members of the accelerated English 10 class and 33% were members of the regular or modified English 10 classes. None of the respondents were special education students. However, 2% (n=3) of the sample were L.E.P. students.

Data Analysis

Survey responses for each student who completed the evaluation were entered into an Excel database. Responses were entered for each of the 29 items on the survey (Appendix 6) and for each of the 142 students who responded. Several items, worded negatively for validity purposes, were reversed. These items were P14 (Part 1, number 4), which stated, “Compared to September, my desire to attend a different high school is…” P16 (Part 1, number 6), which stated, “Compared to September, my desire to drop out of school is…” and P113 (Part 1, number 13), which stated, “Compared to September, my level of discouragement is…” Demographic data, by student number, was obtained from the district office. This data included gender, grade level, unweighted G.P.A., ethnicity, free and reduced lunch status, LEP (limited English proficiency) status, SPE (special education) status, and 504 education plan status. Exploratory data analysis was performed using descriptive statistics, which revealed the mean score and frequency charts for each item.
A factor analysis using varimax rotation was performed on the first 20 items of the survey, which identified four separate factors. These factors were named Student perception of school climate, the Pathfinder program itself, Level of academic motivation, and Teacher reinforcement of the Pathfinder lesson, after reviewing the content of the items comprising them. The first factor, student perception of school climate, included 10 items from Part 1 of the survey (P11, P12, P13, P14 reversed, P15, P18, P19, P110, P111, and P113 reversed) and explained 36.5% of the variance. The concept of student perception of school climate reflects the level of happiness, contentment, and comfort that a student has with his or her school.

The second factor, the Pathfinder program itself, included 4 items from Part 2 of the survey (P21, P22, P23, and P24) and explained 10.8% of the variance. This factor reflects student enjoyment, appreciation, understanding, and perception of mentor preparedness of the Pathfinder program.

The third factor, level of academic motivation, included 4 items from Part 1 of the survey (P16 reversed, P17, P113, and P114) and explained 6.9% of the variance. The concept of academic motivation reflects the level of drive, work, confidence, and intensity that a student applies to being academically successful in high school.

The fourth factor, teacher reinforcement, included only 1 item from Part 2 of the survey (P25) and explained 5.2% of the variance. This factor reflects whether teachers reinforced the Pathfinder lesson with subsequent discussion.

Two of the factors, student perception of school climate and level of academic motivation, may be related to the degree of at-risk a student is for dropping out of high
school. So, further data exploration of them was conducted. Each of these factors was initially divided into three groups: students scoring at or below the 25th percentile, students scoring above the 25th and below the 75th percentile, and students scoring at or above the 75th percentile on each of the two factors. Students in each of the three groups were analyzed as to how influential four spheres of influence: teachers, family, friends, and Pathfinder mentors were on each of the items in Part 3 of the survey, P31-P39. In this part of the survey, students rated each of the spheres as having no influence (1) little influence (2) some influence (3) or being very influential (4) to their views regarding Northwest High School on personal satisfaction, sense of belonging, pride in being a student there, desire to remain, belief that an accepting and nonjudgmental atmosphere exists, desire to graduate from there, motivation to be a good student, belief they be themselves at school, and belief they are treated with respect. A trend appeared indicating that students at the lowest levels on the factors of student perception of school climate and level of academic motivation found the Pathfinder program to be relatively ineffective and students at the highest levels on these factors found it to be relatively effective, so further data exploration was undertaken to assess the students at or below the 10th percentile and at or above the 90th percentile on the two factors of school climate and academic motivation to determine whether the perceived patterns held true.

The factors of student perception of school climate and level of academic motivation were divided into quintiles: students at or below the 10th percentile (#1 on the x axis of the figures depicted in Chapter 4) students at or below the 25th percentile (#2 on the x axis of the figures depicted in Chapter 4), students above the 25th percentile and
below the 75th percentile (#3 on the x axis of the figures depicted in Chapter 4), students
at or above the 75th percentile (#4 on the x axis of the figures depicted in Chapter 4), and
students at or above the 90th percentile (#5 on the x axis of the figures depicted in Chapter
4). The percentage of students at each quintile who rated each of the four spheres of
influence as somewhat (3) or highly influential (4) on the 9 items in Part 3 are depicted
on the y axis in the figures in Chapter 4.

Ethical Considerations

Permission was sought and obtained to conduct this study from the Boise State
University’s Office of Research Compliance Institutional Review Board and the school
district’s research committee. Confidentiality was guaranteed by failing to identify the
school district, the school itself, and the students involved. Students were tracked
individually using only their school district identification number, with their parents’
permission. No one was asked to sign his or her name on any survey. Each student was
informed in writing and in person his or her participation was strictly voluntary. They
were told they may refrain from answering any question or questions of their choosing
and they had the right to withdraw from participation at any point.

In addition, parents were informed of the following information on the
consent/assent form:

All information will remain confidential. Student identification numbers, rather
than names will be used for the survey. If your student is interviewed, he or she
will not be interviewed by first or last name in any publication of the study’s
results. You are able to remove your child from this study at any time. Your child
can discontinue their participation at any time, without penalty of any kind. Your
child may refrain from answering any items or questions that cause them
discomfort.

The survey data has been kept in a locked file cabinet. No one has seen them or
heard them, but my academic advisor and me. The notes and recordings are locked in my
advisor’s office and will be held for three years (as per federal guidelines), then
destroyed.
CHAPTER FOUR: DATA ANALYSIS

Factor One: The Pathfinder Program

This factor included 4 items from Part 2 of the survey and explained 10.8% of the variance. The factor reflects student enjoyment, appreciation, understanding, and perception of mentor preparedness of the Pathfinder program. All four of these items were positively worded, such that a high score reflected the most positive interpretation of that item on a 1 to 4 scale with 1 being “Strongly Disagree”, 2 being “Disagree”, 3 being “Agree”, and 4 being “Strongly Agree”.

The first item asked students to rate their enjoyment of the Pathfinder activities in their English class. One hundred forty-two students responded. Of these, 28% indicating that they did not enjoy the Pathfinder activities, responding with a 1 or a 2. The remaining 72% indicated they enjoyed the Pathfinder activities, responding with a 3 or 4. The mean score obtained by all respondents to this item was a 2.8 with a standard deviation of .78.

The second item asked students to rate their enjoyment of having junior and senior mentors take an interest in them. One hundred forty-two students responded. Of these, 28% indicated they did not enjoy the interest of juniors and seniors by responding with a 1 or 2, and 72% indicated they enjoyed the interest of juniors and seniors by responding with a 3 or 4. The mean score obtained by all respondents was a 2.8 with a standard deviation of .74.
The third item asked students to rate their understanding of the Pathfinder program’s purpose. Of 142 respondents, twenty-four percent of these students indicated they failed to understand the purpose of the Pathfinder program by responding with a 1 or 2, and 76% indicated they understood the purpose of the Pathfinder program by responding with a 3 or 4. The mean score obtained by all respondents was a 2.87 with a standard deviation of .71.

The fourth item asked students to rate the preparedness of the Pathfinder mentors. Forty-seven percent of the 142 respondents indicated they did not feel the Pathfinders were well prepared by responding with a 1 or 2. Fifty-two percent indicated they felt the Pathfinders were well prepared by responding with a 3 or 4. The mean score obtained by all respondents was a 2.49 with a standard deviation of .74.

**Factor Two: Teacher Reinforcement**

This factor included only one item from Part 2 of the survey and explained 5.2% of the variance. The item reflects whether teachers reinforced the Pathfinder lesson with subsequent discussion or follow-through activities. This item asked students to rate whether teachers reinforced the Pathfinder activity by discussing it afterward. One hundred forty-two students responded. Thirty-one percent of students indicated teachers did not reinforce the activity by responding with a 1 or 2, and sixty-eight percent indicated teachers did reinforce the activity through further discussion. The mean score obtained by all respondents was a 2.74 with a standard deviation of .701.
Factor Three: Academic Motivation Factor

The factor of academic motivation reflects the level of drive, work, and intensity that a student applies to being academically successful, based on their high school Grade Point Average (G.P.A.). This factor explained 6.9% of the variance. The factor analysis revealed 4 items that comprised this factor. Three of these items were positively worded; such that a high score reflected the most positive interpretation of that item, on a 1 to 5 scale with 5 representing the most positive motivation. These items addressed each student’s confidence in graduating, confidence in being prepared for college, and motivation to be a good student. There was also one negatively worded item on the questionnaire, such that a low score reflected the most positive interpretation of that item, on a 1 to 5 scale with 1 representing the most positive interpretation. That item indicated the lack of a desire to drop out of high school.

After identifying the four factors, I speculated two factors, level of academic motivation and student perception of school climate might be associated with at-risk status and drop-out probability. I decided to investigate whether students at various levels of academic motivation (divided into quintiles) rated the amount of influence each source (Pathfinders, teachers, family, or friends) exerted on the items in Part 3 of the survey (Appendix 6) differentially. These items asked students to assess whether each source exerted no influence (1) little influence (2) some influence (3) or was very influential (4) to their personal satisfaction with NHS, their sense of belonging at NHS, their NHS pride, their desire to remain at NHS, the belief NHS has an accepting and nonjudgmental atmosphere, their desire to graduate from NHS, their motivation to be a good student, the
belief they can be themselves at NHS, and the belief they are treated with respect at NHS.

The following 9 figures represent the percentage of students at each level of academic motivation that rated each of the four sources as somewhat or highly influential to the measured variable. As an example, if 18% of students at the first level of academic motivation rated Pathfinders as somewhat or highly influential to their personal satisfaction with NHS, then 82% indicated the program was of no or little influence.

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**Figure 1.** The intersection of level of academic motivation with the percentage of students ranking teachers, Pathfinders, friends, or family as somewhat or highly influential on their personal satisfaction with NHS.
The x axis represents how students ranged on the factor of academic motivation. It is broken into quintiles with the number 1 representing students whose academic motivation factor was at or below the 10th percentile, the number 2 representing students whose academic motivation was at or below the 25th percentile, the number 3 representing students whose academic motivation was above the 25th percentile and below the 75th percentile, the number 4 representing students whose academic motivation was equal to or above the 75th percentile, and the number 5 representing students whose academic motivation was at or above the 90th percentile. The y axis indicates the percentage of students who indicated their level of personal satisfaction was either somewhat or very influenced by each of four variables: Pathfinders, teachers, family, or friends.

Eighteen percent of students whose level of academic motivation was at or below the 10th percentile rated the Pathfinder program as being somewhat or highly influential to their level of personal satisfaction with Northwest High School. A slightly greater percentage of these students (35%) indicated their teachers were somewhat or highly influential to their level of satisfaction. Yet, 65% of students with low levels of academic motivation reported families as somewhat or highly influential to their level of personal satisfaction and 88% reported their friends as somewhat or highly influential to their level of personal satisfaction.

Students whose academic motivation was at or below the 25th percentile represent the second data point of each line graph. Of these students, 21% report Pathfinders as being somewhat or highly influential to their level of personal satisfaction. Sixty-one
percent indicate teachers were somewhat or highly influential and 74% report being
influenced to that degree by their family. Eighty-nine percent of students with moderately
low levels of academic motivation report their sense of personal belonging as being
somewhat to very influenced by friends.

The third level of academic motivation is represented by the students who fell
above the 25% and below the 75% of academic motivation. In this group, 35% report
Pathfinders as somewhat or very influential to their level of personal satisfaction.
Seventy-six percent report being somewhat or very influenced by teachers, whereas 74%
report family as somewhat to very influential. Eighty-six percent of students at this level
of academic motivation report friends as somewhat or very influential to their level of
personal satisfaction.

Students at the 4th data point of academic motivation on each line graph represent
those at or above the 75th on academic motivation. They report Pathfinders as somewhat
or highly influential to their level of personal satisfaction at the 54th percentile. Almost all
of the students report each of the other three factors as somewhat or highly influential on
their level of personal satisfaction: 94% cite teachers, 94% cite family, and 92% cite
friends.

Students whose academic motivation is at the 90th percentile or higher report
higher percentages of influence on most of the four spheres on their level of personal
satisfaction. While 70% report Pathfinders as somewhat to very important on their level
of personal satisfaction; 100% report teachers as somewhat to highly influential, 94%
report family as somewhat to highly influential, and 88% report friends as somewhat to highly influential.

Figure 2: The intersection of level of academic motivation with the percentage of students ranking teachers, Pathfinders, friends, or family as somewhat or highly influential on their sense of belonging at NHS.

The x axis represents how students fell on the factor of academic motivation. It is broken into quintiles with the number 1 representing students whose academic motivation factor was at or below the 10\textsuperscript{th} percentile, the number 2 representing students whose academic motivation was at or below the 25\textsuperscript{th} percentile, the number 3 representing students whose academic motivation was above the 25\textsuperscript{th} percentile and below the 75\textsuperscript{th} percentile, the number 4 representing students whose academic motivation was at or above the 75\textsuperscript{th} percentile, and the number 5 representing students whose academic
motivation was at or above the 90th percentile. The y axis indicates the percentage of students who indicated their sense of belonging was either somewhat or very influenced by each of four variables: Pathfinders, teachers, families, or friends.

Only 12% of students whose level of academic motivation was at or below the 10th percentile rated the Pathfinder program as somewhat or highly influential to their sense of belonging at Northwest High School. A greater percentage of these students (35%) indicated their teachers were somewhat or highly influential to their sense of belonging. Similarly, 34% of students with low levels of academic motivation rated families as being somewhat or highly influential to their sense of belonging. A majority of students, 82% reported their friends were somewhat or highly influential to their sense of belonging.

Students whose academic motivation was at or below the 25th percentile represent the second data point on each graph. Of these students, 16% report Pathfinders as being somewhat or highly influence to their sense of belonging. Thirty-nine percent indicate teachers were somewhat or highly influential and 49% report being influenced to that degree by their family. Again, most students (84%) indicated friends were somewhat or highly influential to their sense of belonging.

The third level of academic motivation is represented by students who fell above the 25th and below the 75th percentile of academic motivation. In this group, 42% report Pathfinders as somewhat or highly influential to their sense of belonging. Sixty-five percent report being somewhat or highly influenced by teachers, whereas 60% report families as somewhat to highly influential. Eighty-five percent of students at this level of
academic motivation report friends as somewhat or very influential to their sense of belonging.

Students at the 4th data point on each line graph represent those at or above the 75% percentile on academic motivation. They report Pathfinders as somewhat or highly influential to their sense of belonging at the 70th percentile. A greater percentage of these students report their sense of belonging being somewhat or very influenced by the other three factors: 81% cite teachers, 82% cite family, and 97% cite friends.

Students whose academic motivation is at the 90th percentile or higher report higher percentages of influence by all four spheres on their sense of belonging. While 82% report Pathfinders as somewhat to very important to their sense of belonging, 88% report teachers and family as somewhat to highly influential, and 94% report friends as somewhat to highly influential to their sense of belonging.
Figure 3. The intersection of level of academic motivation with the percentage of students ranking teachers, Pathfinders, friends, or family as somewhat or highly influential on their NHS pride.

The x axis represents how students fell on the factor of academic motivation. It is broken into quintiles with the number 1 representing students whose academic motivation factor was at or below the 10th percentile, the number 2 representing students whose academic motivation factor was at or below the 25th percentile, the number 3 representing students whose academic motivation was above the 25th and below the 75th percentile, the number 4 representing students whose academic motivation was at or above the 75th percentile, and the number 5 representing students whose academic motivation was at or above the 90th percentile. The y axis indicates the percentage of students who indicated their pride in being a Northwest High School student was somewhat or very influenced by each of four factors: Pathfinders, teachers, family, or friends.
Only 18% of students whose level of academic motivation was at or below the 10\textsuperscript{th} percentile rated the Pathfinder program as somewhat to very influential to their sense of Northwest pride. A greater percentage of these students (28%) attributed their teachers to being somewhat or highly influential to their sense of Northwest pride. Only 23% of students with low levels of academic motivation rated families as being somewhat or highly influential to their sense of Northwest pride, while 40% reported friends as somewhat or highly influential.

Students whose academic motivation was at or below the 25\textsuperscript{th} percentile represent the second data point on each line graph. Of these students, 26% report Pathfinders as somewhat to highly influential to their pride in being a student at Northwest High School. Forty-five percent indicate teachers were somewhat or highly influential and 30% report being influenced to that degree by their family. Fifty-eight percent indicated friends were somewhat or highly influential to their Northwest pride.

The third level of academic motivation is represented by students who fell above the 25\textsuperscript{th} and below the 75\textsuperscript{th} percentile of academic motivation. In this group, 42% reported Pathfinders as being somewhat or very influential to their pride in being a student of Northwest High School. Sixty percent report being somewhat or very influenced by teachers, whereas 58% report families as somewhat to highly influential. Seventy-six percent of students at this level of academic motivation report friends as somewhat or very influential to their sense of Northwest pride.

Students at the 4\textsuperscript{th} data point on each line graph represent those at or above the 75\textsuperscript{th} percentile on academic motivation. They report Pathfinders as somewhat or highly
influential to their sense of Northwest pride at the 66th percentile. The following percentages of these students report their Northwest pride being somewhat or very influenced by the other three factors: teachers (94%), family (80%), and friends (100%).

Students whose academic motivation was at the 90th percentile or higher report the following percentages of being somewhat or very influenced by their sense of pride in being a student at Northwest High School: 70% (Pathfinders), 88% (teachers), 88% (family), and 100% (friends).

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Figure 4. The intersection of level of academic motivation with the percentage of students ranking teachers, Pathfinders, friends, or family as somewhat or highly influential on their desire to remain at NHS.
The x axis represents how students fell on the factor of academic motivation. It is broken into quintiles with the number 1 representing students whose academic motivation factor was at or below the 10\textsuperscript{th} percentile, the number 2 representing students whose academic motivation factor was at or below the 25\textsuperscript{th} percentile, the number 3 representing students whose academic motivation was above the 25\textsuperscript{th} and below the 75\textsuperscript{th} percentile, the number 4 representing students whose academic motivation was at or above the 75\textsuperscript{th} percentile, and the number 5 representing students whose academic motivation was at or above the 90\textsuperscript{th} percentile. The y axis indicates the percentage of students who indicated their desire to remain a Northwest High School student was somewhat or very influenced by each of four variables: Pathfinders, teachers, families, or friends.

Only 12\% of students whose level of academic motivation was at or below the 10\textsuperscript{th} percentile rated the Pathfinder program as somewhat or highly influential to their desire to remain at Northwest High School. A greater percentage of these students (28\%) indicated their teachers were somewhat or highly influential to their desire to remain. Thirty-five percent of students with low levels of academic motivation rated families as being somewhat or highly influential to their desire to remain a student of Northwest High School. A majority of students (77\%) reported their friends were somewhat or highly influential to their desire to remain at Northwest.

Students whose academic motivation was at or below the 25\textsuperscript{th} percentile represent the second data point on each graph. Of these students, only 13\% report Pathfinders as somewhat to highly influential to their desire to remain a student at Northwest High School. Fifty-five percent indicate teachers were somewhat or highly influential and 63\%
report being influenced to that degree by their family. Eighty-two percent indicated friends were somewhat or highly influential to their desire to remain a student of Northwest High School.

The third level of academic motivation is represented by students who fell above the 25th and below the 75th percentile of academic motivation. In this group, 36% reported Pathfinders as being somewhat or very influential to their desire to remain a student of Northwest High School. Seventy-five percent report being somewhat or very influenced by teachers and family. Eighty-seven percent of students at this level of academic motivation report friends as somewhat or very influential to their desire to remain at Northwest.

Students at the 4th data point on each line graph represent those at or above the 75th percentile on academic motivation. They report Pathfinders as somewhat or highly influential to their desire to remain at Northwest at the 68th percentile. The following percentages of these students report their desire to remain a student of Northwest High as being somewhat or very influenced by the other three factors as: teachers (87%), family (86%), and friends (97%).

Students whose academic motivation was at the 90th percentile or higher report the following percentages of being somewhat or very influenced by their desire to remain a student at Northwest High School: 77% (Pathfinders), 88% (teachers), 88% (family), and 94% (friends).
Belief in Nonjudgemental Atmosphere

![Belief in Nonjudgemental Atmosphere Graph]

Figure 5. The intersection of level of academic motivation with the percentage of students ranking teachers, Pathfinders, friends or family as somewhat or highly influential on their belief NHS has a nonjudgmental atmosphere.

The x axis represents how students fell on the factor of academic motivation. It is broken into quintiles with the number 1 representing students whose academic motivation factor was at or below the 10\textsuperscript{th} percentile, the number 2 representing students whose academic motivation factor was at or below the 25\textsuperscript{th} percentile, the number 3 representing students whose academic motivation was above the 25\textsuperscript{th} and below the 75\textsuperscript{th} percentile, the number 4 representing students whose academic motivation was at or above the 75\textsuperscript{th} percentile, and the number 5 representing students whose academic motivation was at or above the 90\textsuperscript{th} percentile. The y axis indicates the percentage of students who indicated their belief that Northwest High School has an accepting and nonjudgmental atmosphere.
was somewhat or very influenced by each of four variables: Pathfinders, teachers, family, or friends.

Twenty-nine percent of students whose level of academic motivation was at or below the 10th percentile rated the Pathfinder program as somewhat to very influential to their belief that Northwest has an accepting and nonjudgmental atmosphere. A smaller percentage of these students (24%) attributed their teachers to being somewhat or highly influential to their belief that Northwest has an accepting and nonjudgmental atmosphere. Only 18% of students with low levels of academic motivation rated families as being somewhat or highly influential to this belief, while 60% reported friends as somewhat or highly influential.

Students whose academic motivation was at or below the 25th percentiles represent the second data point on each graph. Of these students, 26% report Pathfinders as being somewhat or highly influential to their belief that Northwest has an accepting and nonjudgmental atmosphere. Forty-five percent indicate teachers were somewhat or highly influential and 29% report being influenced to that degree by their family. Again, most students (66%) indicated friends were somewhat or highly influential to their belief.

The third level of academic motivation is represented by students who fell above the 25th and below the 75th percentile of academic motivation. In this group, 46% reported Pathfinders as being somewhat or very influential to their belief that Northwest has an accepting and nonjudgmental. Sixty-two percent report being somewhat or very influenced by teachers and fifty-three percent report being influenced by family. Sixty-nine percent of students at this level of academic motivation report friends as somewhat
or very influential to their belief that Northwest has an accepting and nonjudgmental atmosphere.

Students at the 4\textsuperscript{th} data point on each line graph represent those at or above the 75\textsuperscript{th} percentile on academic motivation. They report Pathfinders as somewhat or highly influential to their belief that Northwest has an accepting and nonjudgmental atmosphere at the 83rd percentile. The following percentages of these students report their desire to remain a student of Northwest High as being somewhat or very influenced by the other three factors as: teachers (88\%), family (77\%), and friends (88\%).

Students whose academic motivation was at the 90\textsuperscript{th} percentile or higher report the following percentages of being somewhat or very influenced in their belief in an accepting and nonjudgmental atmosphere at Northwest High School: 94\% (Pathfinders), 88\% (teachers), 82\% (family), and 89\% (friends).
Figure 6. The intersection of level of academic motivation with the percentage of students ranking teachers, Pathfinders, friends, or family as somewhat or highly influential on their desire to graduate from NHS.

The x axis represents how students fell on the factor of academic motivation. It is broken into quintiles with the number 1 representing students whose academic motivation factor was at or below the 10th percentile, the number 2 representing students whose academic motivation factor was at or below the 25th percentile, the number 3 representing students whose academic motivation was above the 25th and below the 75th percentile, the number 4 representing students whose academic motivation was at or above the 75th percentile, and the number 5 representing students whose academic motivation was at or above the 90th percentile. The y axis indicates the percentage of students who indicated
their desire to graduate from Northwest High School was somewhat or very influenced by each of four variables: Pathfinders, teachers, family, or friends.

Only 6% of students whose level of academic motivation was at or below the 10th percentile rated the Pathfinder program as somewhat to their desire to graduate from Northwest. A greater percentage of these students (59%) attributed their teachers to being somewhat or highly influential to their desire to graduate from Northwest High School. Seventy-one percent of students with low levels of academic motivation rated families and friends as being somewhat or highly influential to this desire.

Students whose academic motivation was at or below the 25th percentile represent the second data point on each graph. Of these students, 19% report Pathfinders as being somewhat or highly influential to their desire to be a Northwest High graduate. Sixty-three percent indicate teachers were somewhat or highly influential and 76% report being influenced to that degree by their family. Seventy-three percent of students at this level of academic motivation indicated friends were somewhat or highly influential to this desire.

The third level of academic motivation is represented by students who fell above the 25th and below the 75th percentile of academic motivation. In this group, 36% reported Pathfinders as being somewhat or very influential to their desire to graduate from Northwest High School. Eighty-two percent report being somewhat or very influenced by teachers and ninety-one percent report being influenced by family. Seventy-eight percent of students at this level of academic motivation report friends as somewhat or very influential to their desire to become a Northwest High graduate.
Students at the 4th data point on each line graph represent those at or above the 75th percentile on academic motivation. They report Pathfinders as somewhat or highly influential to their desire to graduate from Northwest at the 77th percentile. The following percentages of these students reflect their desire to graduate from Northwest as being somewhat or very influenced by the other three factors as: teachers (100%), family (97%), and friends (91%).

Students whose academic motivation was at the 90th percentile or higher report the following percentages of being somewhat or very influenced in their desire to become a Northwest High graduate: 82% (Pathfinders), 100% (teachers), 94% (family), and 72% (friends).
Figure 7: The intersection of level of academic motivation with the percentage of students ranking teachers, Pathfinders, friends, or family as somewhat or highly influential on their motivations to be a good student.

The x axis represents how students fell on the factor of academic motivation. It is broken into quintiles with the number 1 representing students whose academic motivation factor was at or below the 10\textsuperscript{th} percentile, the number 2 representing students whose academic motivation factor was at or below the 25\textsuperscript{th} percentile, the number 3 representing students whose academic motivation was above the 25\textsuperscript{th} and below the 75\textsuperscript{th} percentile, the number 4 representing students whose academic motivation was at or above the 75\textsuperscript{th} percentile, and the number 5 representing students whose academic motivation was at or above the 90\textsuperscript{th} percentile. The y axis represents the percentage of
students who indicated their motivation to be a good student was somewhat or very influenced by each of four variables: Pathfinders, teachers, family, or friends.

Eighteen percent of students whose level of academic motivation was at or below the 10th percentile rated the Pathfinder program as somewhat or very influential to their motivation to be a good student. A greater percentage of these students (47%) attributed their teachers to being somewhat or highly influential to their motivation to be a good student. Eighty-two percent of students with low levels of academic motivation rated families and sixty-five percent rated friends as being somewhat or highly influential to their motivation.

Students whose academic motivation was at or below the 25th percentile represent the second data point on each graph. Of these students, 21% report Pathfinders as being somewhat or highly influential to their motivation to be a good student. Sixty-one percent indicate teachers were somewhat or highly influential and 53% report being influenced to that degree by their family. Sixty-three percent of students at this level of academic motivation indicated friends were somewhat or highly influential to their motivation.

The third level of academic motivation is represented by students who fell above the 25th and below the 75th percentile of academic motivation. In this group, 35% reported Pathfinders as being somewhat or very influential to their motivation to be a good student. Eighty percent report being somewhat or very influenced by teachers and eighty-nine percent report being influenced by family. Seventy-one percent of students at this level of academic motivation report friends as somewhat or very influential to their motivation to be a good student.
Students at the 4th data point on each line graph represent those at or above the 75th percentile on academic motivation. They report Pathfinders as somewhat or highly influential to their desire to graduate from Northwest at the 71st percentile. The following percentages of these students reflect their motivation to be a good student as being somewhat or very influenced by the other three factors as: teachers (100%), family (97%), and friends (91%).

Students whose academic motivation was at the 90th percentile or higher report the following percentages of being somewhat or very influenced in their motivation to be a good student: 82% (Pathfinders), 100% (teachers), 94% (family), and 82% (friends).

Figure 8. The intersection of level of academic motivation with the percentage of students ranking teachers, Pathfinders, friends, or family as somewhat or highly influential on the belief they can be themselves.
The x axis represents how students fell on the factor of academic motivation. It is broken into quintiles with the number 1 representing students whose academic motivation factor was at or below the 10\textsuperscript{th} percentile, the number 2 representing students whose academic motivation factor was at or below the 25\textsuperscript{th} percentile, the number 3 representing students whose academic motivation was above the 25\textsuperscript{th} and below the 75\textsuperscript{th} percentile, the number 4 representing students whose academic motivation was at or above the 75\textsuperscript{th} percentile, and the number 5 representing students whose academic motivation was at or above the 90\textsuperscript{th} percentile. The y axis represents the percentage of students who indicated the belief they can be themselves was somewhat or very influenced by each of four variables: Pathfinders, teachers, family, or friends.

Twenty-four percent of students whose level of academic motivation was at or below the 10\textsuperscript{th} percentile rated the Pathfinder program as somewhat or very influential to the belief they can be themselves. The same percentage of these students (24%) attributed their teachers to being somewhat or highly influential to the belief they can be themselves. Thirty-five percent of students with low levels of academic motivation rated families and thirty-eight percent rated friends as being somewhat or highly influential to their belief.

Students whose academic motivation was at or below the 25\textsuperscript{th} percentile represent the second data point on each graph. Of these students, 21\% report Pathfinders as being somewhat or highly influential to the belief they can be themselves. Forty-five percent indicate teachers were somewhat or highly influential and 47\% report being influenced to that degree by their family. Seventy-one percent of students at this level of academic
motivation indicated friends were somewhat or highly influential to the belief they can be themselves.

The third level of academic motivation is represented by students who fell above the 25\textsuperscript{th} and below the 75\textsuperscript{th} percentile of academic motivation. In this group, 45\% reported Pathfinders as being somewhat or very influential to the belief they can be themselves. Sixty-nine percent report being somewhat or very influenced by teachers and seventy-five percent report being influenced by family. Eighty-nine percent of students at this level of academic motivation report friends as somewhat or very influential to the belief they can be themselves.

Students at the 4\textsuperscript{th} data point on each line graph represent those at or above the 75\textsuperscript{th} percentile on academic motivation. They report Pathfinders as somewhat or highly influential to the belief they can be themselves at the 83rd percentile. The following percentages of these students reflect the belief they can be themselves as being somewhat or very influenced by the other three factors as: teachers (83\%), family (89\%), and friends (94\%).

Students whose academic motivation was at the 90\textsuperscript{th} percentile or higher report the following percentages of being somewhat or very influenced in the belief they can be themselves as: 94\% (Pathfinders), 88\% (teachers), 88\% (family), and 89\% (friends).
Figure 9. The intersection of level of academic motivation with the percentage of students ranking teachers, Pathfinders, friends, or family as somewhat or highly influential on the belief they are treated with respect.

The x axis represents how students fell on the factor of academic motivation. It is broken into quintiles with the number 1 representing students whose academic motivation factor was at or below the 10\textsuperscript{th} percentile, the number 2 representing students whose academic motivation factor was at or below the 25\textsuperscript{th} percentile, the number 3 representing students whose academic motivation was above the 25\textsuperscript{th} and below the 75\textsuperscript{th} percentile, the number 4 representing students whose academic motivation was at or above the 75\textsuperscript{th} percentile, and the number 5 representing students whose academic motivation was at or
above the 90th percentile. The y axis indicates the percentage of students who indicated the belief they are treated with respect was somewhat or very influenced by each of four variables: Pathfinders, teachers, family, or friends.

Twenty-eight percent of students whose level of academic motivation was at or below the 10th percentile rated the Pathfinder program as somewhat or very influential to the belief they are treated with respect. A greater percentage of these students (47%) attributed their teachers to being somewhat or highly influential to the belief are treated with respect. Fifty-nine percent of students with low levels of academic motivation rated families and seventy-one percent rated friends as being somewhat or highly influential to their belief.

Students whose academic motivation was at or below the 25th percentile represent the second data point on each graph. Of these students, 29% report Pathfinders as being somewhat or highly influential to the belief they are treated with respect. Fifty-eight percent indicate teachers were somewhat or highly influential and 66% report being influenced to that degree by their family. Eighty-two percent of students at this level of academic motivation indicated friends were somewhat or highly influential to the belief they are treated with respect.

The third level of academic motivation is represented by students who fell above the 25th and below the 75th percentile of academic motivation. In this group, 53% reported Pathfinders as being somewhat or very influential to the belief they are treated with respect. Seventy-one percent report being somewhat or very influenced by teachers and 67% report being influenced by family. Eighty-six percent of students at this level of
academic motivation report friends as somewhat or very influential to the belief they are
treated with respect.

Students at the 4th data point on each line graph represent those at or above the
75th percentile on academic motivation. They report Pathfinders as somewhat or highly
influential to the belief they are treated with respect at the 86th percentile. The following
percentages of these students reflect the belief they are treated with respect as being
somewhat or very influenced by the other three factors as: teachers (94%), family (94%),
and friends (100%).

Students whose academic motivation was at the 90th percentile or higher report
the following percentages of being somewhat or very influenced in the belief they are
treated with respect as: 94% (Pathfinders), 88% (teachers), 88% (family), and 89%
(friends).

**Factor Four: Student Perception of School Climate Construct**

The concept of student perception of school climate reflects the level of
happiness, contentment, and comfort that a student has with his or her school. This factor
explained 36.5% of the variance. The factor analysis revealed 10 questionnaire items that
comprised this factor. Eight of these items were positively worded, such that a high score
reflected the most positive interpretation of that item, on a 1 to 5 scale with 5
representing the most positive perspective. These items addressed the perception of being
respected by other students, feeling appreciated and cared about by the faculty, having a
sense of pride in being a student of Northwest High School, feeling as if a student “fit
in,” having a sense of personal belonging at Northwest, believing the school has an accepting and non-judgmental atmosphere, and being personally satisfied with Northwest High School. There were also two negatively worded items on the questionnaire, such that a low score reflected the most positive interpretation of that item, on a 1 to 5 scale with 1 representing the most positive interpretation. These items included the lack of a desire to attend a different high school and the lack of having a sense of discouragement with school.

As I indicated earlier, I speculated two of the factors; level of academic motivation and student perception of school climate might be associated with at-risk status and drop-out probability. In the previous 9 figures, the x variable was student motivation. So, I decided to investigate whether students at various levels of perception of school climate (divided into quintiles) rated the amount of influence each source (Pathfinders, teachers, family, or friends) exerted on the items in Part 3 of the survey (Appendix 6) differentially. These items asked students to assess whether each source exerted no influence (1) little influence (2) some influence (3) or was very influential (4) to their personal satisfaction with NHS, their sense of belonging at NHS, their NHS pride, their desire to remain at NHS, the belief NHS has an accepting and nonjudgmental atmosphere, their desire to graduate from NHS, their motivation to be a good student, the belief they can be themselves at NHS, and the belief they are treated with respect at NHS. The following 9 figures represent the percentage of students at each level of perception of school climate that rated each of the four sources as somewhat or highly influential to the measured variable. In these 9 figures, the x variable is perception of school climate. As an
example, if 25% of students at the first level of perception of school climate rated Pathfinders as somewhat or highly influential to their personal satisfaction with NHS, then 75% indicated the program was of no or little influence.

Figure 10. The intersection of level of student perception of school climate with the percentage of students ranking teachers, Pathfinders, friends, or family as somewhat or highly influential on their personal satisfaction with NHS.

The x axis represents how students fell on the factor of student perception of school climate. It is broken into quintiles with the number 1 representing students whose level of student perception of school climate was at or below the 10th percentile, the number 2 representing students whose level of student perception of school climate was
at or below the 25th percentile, the number 3 representing students whose level of student perception of school climate was above the 25th percentile and below the 75th percentile, the number 4 representing students whose level of student perception of school climate was equal to or above the 75th percentile, and the number 5 representing students whose level of student perception of school climate was in the 90th percentile or above. The y axis indicates the percentage of students who indicated their level of personal satisfaction was either somewhat or very influenced by each of four variables: Pathfinders, teachers, families, or friends.

Twenty-five percent of students whose level of student perception of school climate was at or below the 10th percentile rated the Pathfinder program as being somewhat or highly influential to their level of personal satisfaction with Northwest High School. A slightly greater percentage of these students (38%) indicated their teachers were somewhat or highly influential to their level of personal satisfaction. Yet, 75% of students with low levels of student perception of school climate reported families as somewhat or highly influential to their level of personal satisfaction and 94% reported their friends as somewhat or highly influential to their level of personal satisfaction.

Students whose level of student perception of school climate was at or below the 25th percentile represent the second data point of each line graph. Of these students, 25% report Pathfinders being somewhat or highly influential to their level of personal satisfaction. Fifty percent indicate teachers were somewhat or highly influential and 75% report being influenced to that degree by their family. Eighty-nine percent of students
with moderately low student perception of school climate report their sense of personal belonging as being somewhat to very influenced by friends.

The third level of academic motivation is represented by students who fell above the 25% and below the 75% percentile of student perception of school climate. In this group, 39% report Pathfinders as somewhat or very influential to their level of personal satisfaction. Eighty-one percent report being somewhat or very influenced by teachers, whereas 73% report families as somewhat to very influential. Eighty–seven percent of students at this level of student perception of school climate report friends as somewhat or very influential on their level of personal satisfaction.

Students at the 4th data point on each line graph represent those at or above the 75th percentile on student perception of school climate. They report Pathfinders as somewhat or highly influential to their level of personal satisfaction at the 50th percentile. A vast majority of them report each of the other three factors as somewhat or highly influential to their level of personal satisfaction: 97% cite teachers, 94% cite family, and 94% cite friends.

Students whose level of student perception of school climate is at the 90th percentile or higher report higher percentages of influence on most of the four spheres to their level of personal satisfaction. While 47% report Pathfinders as somewhat to very important to their level of personal satisfaction; 100% report teachers as somewhat to highly influential, 88% report family as somewhat to highly influential, and 100% report friends as somewhat to highly influential.
Figure 11. The intersection of level of student perception of school climate with the percentage of students ranking teachers, Pathfinders, friends, or family as somewhat or highly influential on their sense of belonging at NHS.

The x axis represents how students fell on the factor of student perception of school climate. It is broken into quintiles with the number 1 representing students whose level of student perception of school climate factor was at or below the 10th percentile, the number 2 representing students whose student perception of school climate was at or below the 25th percentile, the number 3 representing students whose student perception of school climate was above the 25th percentile and below the 75th percentile, the number 4 representing students whose student perception of school climate was at or above the 75th percentile, and the number 5 representing students whose student perception of school...
climate was at or above the 90th percentile or above. The y axis indicates the percentage of students who indicated their sense of belonging was either somewhat or very influenced by each of four variables: Pathfinders, teachers, families, or friends.

Twenty-five percent of students whose level of student perception of school climate was at or below the 10th percentile rated the Pathfinder program as somewhat or highly influential to their sense of belonging at Northwest High School. A greater percentage of these students (44%) indicated their teachers were somewhat or highly influential to their sense of belonging. Thirty-one percent of students with low levels of student perception of school climate rated families as being somewhat or highly influential to their sense of belonging. A majority of students, 75%, reported their friends were somewhat or highly influential to their sense of belonging.

Students whose level of student perception of school climate was at or below the 25th percentiles represent the second data point on each graph. Of these students, 25% report Pathfinders as being somewhat or highly influential to their sense of belonging. Thirty-nine percent indicate teachers were somewhat or highly influential and 42% report being influenced to that degree by their family. Again, most students (86%) indicated friends were somewhat or highly influential to their sense of belonging.

Students who fell above the 25th and below the 75th percentile represent the third level of student perception of school climate. In this group, 48% report Pathfinders as somewhat or highly influential to their sense of belonging. Sixty-seven percent report being somewhat or highly influenced by teachers, whereas 63% report families as somewhat to highly influential. Eighty-seven percent of students at this level of student
perception of school climate report friends as somewhat or very influential to their sense of belonging.

Students at the 4th data point on each line graph represent those at or above the 75% percentile on student perception of school climate. They report Pathfinders as somewhat or highly influential to their sense of belonging at the 53rd percentile. A greater percentage of these students report their sense of belonging being somewhat or very influenced by the other three factors: 94% cite teachers, 81% cite family, and 100% cite friends.

Students whose level of student perception of school climate is at the 90th percentile or higher report higher percentages of influence by all four spheres on their sense of belonging. While 59% report Pathfinders as somewhat to very important to their sense of belonging, 100% report teachers and friends as somewhat to very influential to their sense of belonging. Eighty-two percent report family as somewhat to very influential.
Figure 12. The intersection of level of student perception of school climate with the percentage of students ranking teachers, Pathfinders, friends, or family as somewhat or highly influential on their sense of NHS pride.

The x axis represents how students fell on the factor of student perception of school climate. It is broken into quintiles with the number 1 representing students whose level of student perception of school climate was at or below the 10th percentile, the number 2 representing students whose level of student perception of school climate was at or below the 25th percentile, the number 3 representing students whose student perception of school climate was above the 25th and below the 75th percentile, the number 4 representing students whose level of student perception of school climate was at or above the 75th percentile, and the number 5 representing students whose level of student perception of school climate was at or above the 90th percentile. The y axis indicates the
percentage of students who indicated their pride in being a Northwest High School student was somewhat or very influenced by each of four variables: Pathfinders, teachers, family, or friends.

Twenty-five percent of students whose level of student perception of school climate was at or below the 10th percentile rated the Pathfinder program as somewhat to very influential to their sense of Northwest pride. A lesser percentage of these students (19%) attributed their teachers to being somewhat or highly influential to their sense of Northwest pride. Thirty-eight percent of students with low levels of academic motivation rated families as being somewhat or highly influential to their sense of Northwest pride, while 31% reported friends as somewhat or highly influential.

Students whose level of student perception of school climate was at or below the 25th percentile represent the second data point on each graph. Of these students, 25% report Pathfinders as somewhat to highly influential to their pride in being a student at Northwest High School. Similarly, 25% indicate teachers were somewhat or highly influential and 29% report being influenced to that degree by their family. Forty-three percent indicated friends were somewhat or highly influential to their Northwest pride.

Students who fell above the 25th and below the 75th percentile represent the third level of student perception of school climate. In this group, 50% reported Pathfinders as being somewhat or very influential to their pride in being a student of Northwest High School. Seventy-two percent report being somewhat or very influenced by teachers, whereas 61% report families as somewhat to highly influential. Eighty-four percent of
students at this level of student perception of school climate report friends as somewhat or very influential to their sense of Northwest pride.

Students at the 4th data point on each line graph represent those at or above the 75th percentile on student perception of school climate. They report Pathfinders as somewhat or highly influential to their sense of Northwest pride at the 59th percentile. The following percentages of these students report their Northwest pride being somewhat or very influenced by the other three factors: teachers (97%), family (75%), and friends (97%).

Students whose student perception of school climate was at the 90th percentile or higher report the following percentages of being somewhat or very influenced by their sense of pride in being a student at Northwest High School: 59% (Pathfinders), 100% (teachers), 81% (family), and 100% (friends).
Figure 13. The intersection of level of student perception of school climate with the percentage of students ranking teachers, Pathfinders, friends, or family as somewhat or highly influential on their desire to remain at NHS.

The x axis represents how students fell on the factor of student perception of school climate. It is broken into quintiles with the number 1 representing students whose level of student perception of school climate was at or below the 10th percentile, the number 2 representing students whose level of student perception of school climate was at or below the 25th percentile, the number 3 representing students whose student perception of school climate was above the 25th and below the 75th percentile, the number 4 representing students whose level of student perception of school climate was at or above the 75th percentile, and the number 5 representing students whose student perception of school climate was at or above the 90th percentile. The y axis indicates the...
percentage of students who indicated their desire to remain at Northwest High School
student was somewhat or very influenced by each of four variables: Pathfinders, teachers,
families, or friends.

Twenty-five percent of students whose level of student perception of school
climate was at or below the 10th percentile rated the Pathfinder program as somewhat or
highly influential to their desire to remain at Northwest High School. The same
percentage of these students (25%) indicated their teachers were somewhat or highly
influential to their desire to remain. Thirty-eight percent of students with low levels of
student perception of school climate rated families as being somewhat or highly
influential to their desire to remain a student of Northwest High School. A majority of
students (75%) reported their friends were somewhat or highly influential to their desire
to remain at Northwest.

Students whose student perception of school climate was at or below the 25th
percentile represent the second data point on each graph. Of these students, 22% report
Pathfinders as somewhat to highly influential to their desire to remain a student at
Northwest High School. Twenty-nine percent indicate teachers were somewhat or highly
influential and 39% report being influenced to that degree by their family. Sixty-eight
percent indicated friends were somewhat or highly influential to their desire to remain a
student of Northwest High School.

Students who fell above the 25th and below the 75th percentile represent the third
level of student perception of school climate. In this group, 42% reported Pathfinders as
being somewhat or very influential to their desire to remain a student of Northwest High
School. Seventy-nine percent report being somewhat or very influenced by teachers and 81% by family. Ninety-four percent of students at this level of student perception of school climate report friends as somewhat or very influential to their desire to remain at Northwest.

Students at the 4th data point on each line graph represent those at or above the 75th percentile on student perception of school climate. They report Pathfinders as somewhat or highly influential to their desire to remain at Northwest at the 56th percentile. The following percentages of these students report their desire to remain a student of Northwest High as being somewhat or very influenced by the other three factors as: teachers (100%), family (91%), and friends (94%).

Students whose student perception of school climate was at the 90th percentile or higher report the following percentages of being somewhat or very influenced by their desire to remain a student at Northwest High School: 53% (Pathfinders), 100% (teachers), 82% (family), and 100% (friends).
Figure 14. The intersection of level of student perception of school climate with the percentage of students ranking teachers, Pathfinders, friends, or family as somewhat or highly influential on the belief NHS has an accepting and nonjudgmental atmosphere.

The x axis represents how students fell on the factor of student perception of school climate. It is broken into quintiles with the number 1 representing students whose level of student perception of school climate was at or below the 10\textsuperscript{th} percentile, the number 2 representing students whose level of student perception of school climate was at or below the 25\textsuperscript{th} percentile, the number 3 representing students whose level of student perception of school climate was above the 25\textsuperscript{th} and below the 75\textsuperscript{th} percentile, the number 4 representing students whose student perception of school climate was at or above the 75\textsuperscript{th} percentile, and the number 5 representing students whose student perception of school climate was at or above the 90\textsuperscript{th} percentile. The y axis indicates the percentage of
students who indicated their belief that Northwest High School has an accepting and nonjudgmental atmosphere was somewhat or very influenced by each of four variables: Pathfinders, teachers, family, or friends.

Only 31% of students whose level of student perception of school climate was at or below the 10th percentile rated the Pathfinder program as somewhat to very influential to their belief that Northwest has an accepting and nonjudgmental atmosphere. A smaller percentage of these students (25%) attributed their teachers to being somewhat or highly influential to their belief that Northwest has an accepting and nonjudgmental atmosphere. Only 44% of students with low levels of academic motivation rated families as being somewhat or highly influential to this belief, while 50% reported friends as somewhat or highly influential.

Students whose student perception of school climate was at or below the 25th percentiles represent the second data point on each graph. Of these students, 25% report Pathfinders as being somewhat or highly influential to their belief that Northwest has an accepting and nonjudgmental atmosphere. Twenty-nine percent indicate teachers were somewhat or highly influential and 29% report being influenced to that degree by their family. Forty-six percent of students indicated friends were somewhat or highly influential to their belief.

The third level of student perception of school climate is represented by students who fell above the 25th and below the 75th percentile of student perception of school climate. In this group, 54% reported Pathfinders as being somewhat or very influential to their belief that Northwest has an accepting and nonjudgmental. Sixty-six percent report
being somewhat or very influenced by teachers and 51% report being influenced by family. Seventy-eight percent of students at this level of student perception of school climate report friends as somewhat or very influential to their belief that Northwest has an accepting and nonjudgmental atmosphere.

Students at the 4th data point on each line graph represent those at or above the 75th percentile on student perception of school climate. They report Pathfinders as somewhat or highly influential to their belief that Northwest has an accepting and nonjudgmental atmosphere at the 69th percentile. The following percentages of these students report their desire to remain a student of Northwest High as being somewhat or very influenced by the other three factors as: teachers (91%), family (81%), and friends (88%).

Students whose student perception of school climate was at the 90th percentile or higher report the following percentages of being somewhat or very influenced in their belief in an accepting and nonjudgmental atmosphere at Northwest High School: 71% (Pathfinders), 100% (teachers), 82% (family), and 94% (friends).
Figure 15: The intersection of level of student perception of school climate with the percentage of students ranking teachers, Pathfinders, friends, or family as somewhat or highly influential on their desire to graduate from NHS.

The x axis represents how students fell on the factor of level of student perception of school climate. It is broken into quintiles with the number 1 representing students whose level of student perception of school climate was at or below the 10th percentile, the number 2 representing students whose level of student perception of school climate was at or below the 25th percentile, the number 3 representing students whose level of student perception of school climate was above the 25th and below the 75th percentile, the number 4 representing students whose level of student perception of school climate was above the 75th and below the 90th percentile, and the number 5 representing students whose level of student perception of school climate was at or above the 90th percentile. The y axis indicates the
percentage of students who indicated their desire to graduate from Northwest High School was somewhat or very influenced by each of four variables: Pathfinders, teachers, family, or friends.

Nineteen percent of students whose level of student perception of school climate was at or below the 10th percentile rated the Pathfinder program as somewhat to their desire to graduate from Northwest. A greater percentage of these students (44%) attributed their teachers to being somewhat or highly influential to their desire to graduate from Northwest High School. Seventy-five percent of students with low levels of academic motivation rated families and 56% rated friends as being somewhat or highly influential to this desire.

Students whose student perception of school climate was at or below the 25th percentile represent the second data point on each graph. Of these students, 14% report Pathfinders as being somewhat or highly influential to their desire to be a Northwest High graduate. Fifty-four percent indicate teachers were somewhat or highly influential and 82% report being influenced to that degree by their family. Fifty-four percent of students at this level of student perception of school climate indicated friends were somewhat or highly influential to this desire.

Students who fell above the 25th and below the 75th percentile represent the third level of student perception of school climate. In this group, 50% reported Pathfinders as being somewhat or very influential to their desire to graduate from Northwest High School. Eighty-seven percent report being somewhat or very influenced by teachers and 88% report being influenced by family. Eighty-seven percent of students at this level of
student perception of school climate report friends as somewhat or very influential to their desire to become a Northwest High graduate.

Students at the 4th data point on each line graph represent those at or above the 75th percentile on student perception of school climate. They report Pathfinders as somewhat or highly influential to their desire to graduate from Northwest at the 59th percentile. The following percentages of these students reflect their desire to graduate from Northwest as being somewhat or very influenced by the other three factors as: teachers (100%), family (100%), and friends (97%).

Students whose level of student perception of school climate was at the 90th percentile or higher report the following percentages of being somewhat or very influenced in their desire to become a Northwest High graduate: 71% (Pathfinders), 100% (teachers), 100% (family), and 100% (friends).
Figure 16. The intersection of level of student perception of school climate with the percentage of students ranking teachers, Pathfinders, friends, or family as somewhat or highly influential on their desire to be a good student.

The x axis represents how students fell on the factor of student perception of school climate. It is broken into quintiles with the number 1 representing students whose level of student perception of school climate was at or below the 10th percentile, the number 2 representing students whose level of student perception of school climate was at or below the 25th percentile, the number 3 representing students whose student perception of school climate was above the 25th and below the 75th percentile, the number 4 representing students whose level of student perception of school climate was at or above the 75th percentile, and the number 5 representing students whose student
perception of school climate was at or above the 90th percentile. The y axis indicates the percentage of students who indicated their motivation to be a good student was somewhat or very influenced by each of four variables: Pathfinders, teachers, family, or friends.

Twenty-five percent of students whose level of student perception of school climate was at or below the 10th percentile rated the Pathfinder program as somewhat or very influential to their motivation to be a good student. A greater percentage of these students (56%) attributed their teachers to being somewhat or highly influential to their motivation to be a good student. Ninety-four percent of students with low levels of student perception of school climate rated families and sixty-nine percent rated friends as being somewhat or highly influential to their motivation.

Students whose student perception of school climate was at or below the 25th percentile represent the second data point on each graph. Of these students, 21% report Pathfinders as being somewhat or highly influential to their motivation to be a good student. Sixty-one percent indicate teachers were somewhat or highly influential and 89% report being influenced to that degree by their family. Fifty-four percent of students at this level of academic motivation indicated friends were somewhat or highly influential to their motivation.

Students who fell above the 25th and below the 75th percentile represent the third level of student perception of school climate. In this group, 46% reported Pathfinders as being somewhat or very influential to their motivation to be a good student. Eighty-three percent report being somewhat or very influenced by teachers and 89% report being
influenced by family. Fifty-four percent of students at this level of academic motivation report friends as somewhat or very influential to their motivation to be a good student.

Students at the 4th data point on each line graph represent those at or above the 75th percentile on student perception of school climate. They report Pathfinders as somewhat or highly influential to their desire to graduate from Northwest at the 56th percentile. The following percentages of these students reflect their motivation to be a good student as being somewhat or very influenced by the other three factors as: teachers (94%), family (97%), and friends (94%).

Students whose student perception of school climate was at the 90th percentile or higher report the following percentages of being somewhat or very influenced in their motivation to be a good student: 59% (Pathfinders), 94% (teachers), 94% (family), and 100% (friends).
Figure 17. The intersection of level of student perception of school climate with the percentage of students ranking teachers, Pathfinders, friends, or family as somewhat or highly influential on the belief they can be themselves.

The x axis represents how students fell on the factor of student perception of school climate. It is broken into quintiles with the number 1 representing students whose academic motivation factor was at or below the 10th percentile, the number 2 representing students whose level of student perception of school climate was at or below the 25th percentile, the number 3 representing students whose student perception of school climate was above the 25th and below the 75th percentile, the number 4 representing students whose level of student perception of school climate was at or above the 75th percentile, and the number 5 representing students whose student perception of school climate was at or above the 90th percentile. The y axis indicates the percentage of students who
indicated the belief they can be themselves was somewhat or very influenced by each of four variables: Pathfinders, teachers, family, or friends.

Twenty-five percent of students whose level of student perception of school climate was at or below the 10th percentile rated the Pathfinder program as somewhat or very influential to the belief they can be themselves. A slightly higher percentage of these students (31%) attributed their teachers to being somewhat or highly influential to the belief they can be themselves. Fifty percent of students with low levels of student perception of school climate rated families and 69% rated friends as being somewhat or highly influential to their belief.

Students whose student perception of school climate was at or below the 25th percentile represent the second data point on each graph. Of these students, 25% report Pathfinders as being somewhat or highly influential to the belief they can be themselves. Twenty-nine percent indicate teachers were somewhat or highly influential and 50% report being influenced to that degree by their family. Seventy-one percent of students at this level of student perception of school climate indicated friends were somewhat or highly influential to the belief they can be themselves.

The third level of student perception of school climate is represented by students who fell above the 25th and below the 75th percentile of academic motivation. In this group, 50% reported Pathfinders as being somewhat or very influential to the belief they can be themselves. Seventy-one percent report being somewhat or very influenced by teachers and 73% report being influenced by family. Eighty-nine percent of students at
this level of student perception of school climate report friends as somewhat or very influential to the belief they can be themselves.

Students at the 4th data point on each line graph represent those at or above the 75th percentile on student perception of school climate. They report Pathfinders as somewhat or highly influential to the belief they can be themselves at the 69th percentile. The following percentages of these students reflect the belief they can be themselves as being somewhat or very influenced by the other three factors as: teachers (97%), family (91%), and friends (94%).

Students whose student perception of school climate was at the 90th percentile or higher report the following percentages of being somewhat or very influenced in the belief they can be themselves as: 70% (Pathfinders), 94% (teachers), 88% (family), and 94% (friends).
Figure 18. The intersection of level of student perception of school climate with the percentage of students ranking teachers, Pathfinders, friends, or family as somewhat or highly influential on the belief they are treated with respect.

The x axis represents how students fell on the factor of student perception of school climate. It is broken into quintiles with the number 1 representing students whose level of student perception of school climate was at or below the 10th percentile, the number 2 representing students whose level of student perception of school climate was at or below the 25th percentile, the number 3 representing students whose student perception of school climate was above the 25th and below the 75th percentile, the number 4 representing students whose level of student perception of school climate was at or above the 75th percentile, and the number 5 representing students whose student perception of school climate was at or above the 90th percentile. The y axis indicates the
percentage of students who indicated the belief they are treated with respect was somewhat or very influenced by each of four variables: Pathfinders, teachers, family, or friends.

Thirty-one percent of students whose level of student perception of school climate was at or below the 10th percentile rated the Pathfinder program as somewhat or very influential to the belief they are treated with respect. A slightly higher percentage of these students (37%) attributed their teachers to being somewhat or highly influential to the belief are treated with respect. Fifty-six percent of students with low levels of academic motivation rated families and friends as being somewhat or highly influential to their belief.

Students whose student perception of school climate was at or below the 25th percentile represent the second data point on each graph. Of these students, 25% report Pathfinders as being somewhat or highly influential to the belief they are treated with respect. Thirty-nine percent indicate teachers were somewhat or highly influential and 43% report being influenced to that degree by their family. Sixty-four percent of students at this level of student perception of school climate indicated friends were somewhat or highly influential to the belief they are treated with respect.

The third level of academic motivation is represented by students who fell above the 25th and below the 75th percentile of academic motivation. In this group, 60% reported Pathfinders as being somewhat or very influential to the belief they are treated with respect. Eighty-one percent report being somewhat or very influenced by teachers and 78% report being influenced by family. Ninety percent of students at this level of
academic motivation report friends as somewhat or very influential to the belief they are treated with respect.

Students at the 4\textsuperscript{th} data point on each line graph represent those at or above the 75\textsuperscript{th} percentile on student perception of school climate. They report Pathfinders as somewhat or highly influential to the belief they are treated with respect at the 75\textsuperscript{th} percentile. The following percentages of these students reflect the belief they are treated with respect as being somewhat or very influenced by the other three factors as: teachers (94\%), family (94\%), and friends (97\%).

Students whose student perception of school climate was at the 90\textsuperscript{th} percentile or higher report the following percentages of being somewhat or very influenced in the belief they are treated with respect as: 70\% (Pathfinders), 100\% (teachers), 94\% (family), and 94\% (friends).
CHAPTER FIVE: DISCUSSION

Responses to Research Questions

Although over 70% of the students surveyed indicated they enjoyed the Pathfinder activities, the interest the mentors took in them, and understood the purpose of the program; it failed to have the desired impact on the students most at-risk: those with low levels of academic motivation and poor perceptions of school climate. I will address the findings related to each of the research questions.

Research Question One: To what extent does implementation of a sophomore mentoring program influence sophomore students’ perception over a period of one school year regarding school satisfaction, sense of belonging, academic achievement, and desire to graduate from high school?

After students were disaggregated into five levels of academic motivation, the differential impact of the program became apparent. At the lowest level of academic motivation, between 6% and 29% of students rated the Pathfinder program as being somewhat or highly influential on school satisfaction, sense of belonging, Northwest school pride, desire to remain at NHS, academic motivation, desire to graduate from NHS, belief NHS had a nonjudgmental atmosphere, belief they can be themselves, and they are treated with respect. There were 71% of students at this level who indicated the Pathfinder program was of no or little influence on these factors. Data revealed as academic motivation increased, so did students’ overall assessment of the Pathfinder program. At the second level of academic motivation, between 19% and 29% of the
students reported Pathfinders was somewhat or highly influential on each of the variables. Again, 71% of students at this level of academic motivation did not find the program influential to these variables. At the third level of academic motivation, between 35% and 53% reported Pathfinders as somewhat or highly influential on each of the variables. At the fourth level of academic motivation, between 54% and 86% of the students rated the Pathfinder program as somewhat or highly influential on each of the variables. At the highest level of academic motivation, between 70% and 94% rated the Pathfinder program as somewhat or highly influential on each of the variables. Thus, it is evident the more academically motivated a student is, the likelihood of the Pathfinder program influencing the other variables increased. The program was most effectively for highly motivated students. Unfortunately, the program appears to have had little impact on those students most at risk, specifically those who were not academically motivated.

After students were disaggregated into five levels of perception of school climate, it became obvious that the impact of the program varied amongst groups, similar to the earlier trend. At the lowest level of student perception of school climate, from 19% (26/142) to 31% (44/142) of survey participants rated the Pathfinder program as somewhat or highly influential on each of the variables. Anywhere from 69% to 79% of the students in this category indicated the program had little or no influence on these variables. At the second level of perception of school climate, between 14% and 25% of students rated the Pathfinder program as somewhat or highly influential on each of the variables. At the third level of perception of school climate, between 39% and 60% of students rated the Pathfinder program as somewhat or highly influential on each of the
variables. At the fourth level of perception of school climate, between 50% and 75% of students rated the Pathfinder program as somewhat or highly influential on each of the variables. At the highest level of student perception of school climate, between 41% and 70% of the students rated the Pathfinder program as somewhat or highly influential. In general, as student perception of school climate rose, so did student assessment of the Pathfinder program. However, the trend did not hold true at the second and fifth levels of student perception of school climate. It is difficult for me to speculate why the Pathfinder program had less impact at the second level than the first level. However, at the fifth and highest level of perception of school climate, perhaps students at that level of perception of school climate may have high degrees of school belonging; possibly influenced by the activities, clubs, and school organizations they are part of. In comparison to their involvement in other activities, than Pathfinder program may exert relatively less influence. These students may have a greater sense of internal locus of control; and may be less likely to attribute their perception of school climate to any external factor and more likely to attribute to their own self-esteem, actions, and attitudes.

Regardless of the slight difference in the trends, the overall trends that at-risk students were less likely to be positively influenced by the program than more academically motivated students. This could be attributed to a number of possibilities. Since these students lack academic motivation, which is a correlate to low achievement, it may be that previous school failure has diminished their ability to trust and connect to any school-affiliated programs. It may also be that a perceived discrepancy existed between the Pathfinder mentors and these students, making it hard to relate to them as
peers. Even though an attempt was made to encourage teachers to nominate a wide range of students to be mentors, those that accepted may have been highly academically motivated (mean G.P.A.= 3.54), so students who were at low levels of academic motivation may not have viewed the mentors as similar to themselves or as actual peers. It may also be their experience in school and the themes of the program were contradictory, rendering them invalid. More research is needed to determine what factors undermined the program’s success and the most effective methods to improve it.

Research question two: If sophomore students’ perception, over a period of one school year, of school satisfaction, sense of belonging, motivation to be a good student, and desire to graduate does change, how does the mentoring program’s influence compare to other spheres of influence?

When compared to teachers, family, and friends, the Pathfinder program was identified by participants as less effective than all other sources of influence on students’ personal satisfactions with NHS. Depending on their level of academic motivation or perception of school climate, between 18% and 70% found the Pathfinder program to be somewhat to very influential to their personal satisfaction, In comparison, between 35% and 100% of students found teachers to be somewhat to very influential; between 75% and 94% found family to be somewhat or very influential, and between 88% and 100% found friends to be somewhat or highly influential. At the lowest two levels of academic motivation and perception of school climate, it is disappointing both Pathfinders and teachers were quite ineffective. As students levels of academic motivation and perception of school climate rose, so did their estimation of the amount of influence each source
exerted. It is surprising family exerted the amount of influence it did, on a variable directly related to school satisfaction. Friends were clearly the most influential to students’ sense of satisfaction with school.

When compared to teachers, family, and friends, the Pathfinder program was identified as less effective than all other sources of influences on students’ sense of belonging at NHS. Depending on their level of academic motivation or perception of school climate, between 12% and 82% found the Pathfinder program to be somewhat or highly influential to their sense of belonging. In comparison, between 35% and 100% found teachers to be somewhat or highly influential; between 31% and 88% found family to be somewhat or highly influential; and between 75% and 100% found friends to be somewhat to highly influential. At the lowest two levels of academic motivation and perception of school climate, Pathfinder, teachers, and family were all relatively ineffective. As students’ levels of academic motivation and perception of school climate rose, so did their estimation of the amount of influence each source exerted. However, it is interesting that family was nearly as important as teachers as every level of academic motivation and perception of school climate to students’ sense of belonging at NHS. Again, friends were the greatest source of influence to students’ sense of belonging.

When compared to teachers, family, and friends, the Pathfinder program was identified by participants as less effective than all other sources of influence to their motivation to be good students. Depending on their level of academic motivation or perception of school climate, between 18% and 82% found the Pathfinder program to be somewhat or highly influential to their motivation to be a good student. In comparison,
between 47% and 100% found teachers to be somewhat or highly influential; between 82% and 94% found family to be somewhat or very influential, and between 65% to 100% found friends to be somewhat of highly influential. At the lowest two levels of academic motivation, Pathfinders was very ineffective. As the students levels of academic motivation and perception of school climate rose, so did their estimation of the amount of influence each source exerted. Family was the most important source of influence to the motivation to be a good student in six of the ten levels of academic motivation and perception of school climate, teachers were the next most influential source of influence, followed by friends and Pathfinders. It is important to note the power that family and teachers have in motivation students to do well academically.

When compared to teachers, family, and friends, the Pathfinder program was identified as less effective than all other sources of influence on students’ desire to graduate from NHS. Depending on their level of academic motivation, between 6% and 82% found the Pathfinder program to be somewhat or very influential to their desire to graduate from NHS. In comparison, between 44% and 100% found teachers to be somewhat or highly influential; between 71% to 100% found family to be somewhat or highly influential, and 56% and 100% found friends to be somewhat to highly influential. At the lowest two levels of academic motivation, Pathfinders and teachers were equally or less effective than any other source of influence. Teachers were considered much more influential to the desire to graduate from NHS at the 3rd, 4th, and 5th levels of academic motivation and perception of school climate. However, family was the most important
source of influence to students’ desire to graduate from NHS. Friends were the next most important source of influence on students’ desire to graduate from NHS.

When compared to teachers, family, and friends, the Pathfinder program was identified by participants as being less effective than all other sources of influence, regardless of level of academic motivation, on a variety of variables with a few exceptions. One exception was at the first level of academic motivation. At this level, the Pathfinder program was identified by participants as being more influential in students’ perception that the school had an accepting and nonjudgmental atmosphere than teachers and family. Also, at the fourth level of academic motivation, Pathfinders was more influential than family on belief in an accepting and nonjudgmental atmosphere. At the highest level of academic motivation, Pathfinders was more influential than any other factor on the belief NHS has an accepting and nonjudgmental atmosphere. Also, at the highest level of academic motivation, Pathfinders was more influential than friends in participants’ desire to graduate from NHS and equally influential as friends on participants’ motivation to be good students. Teachers and Pathfinders at the fourth level of academic motivation equally influenced the belief that students can be themselves, and the Pathfinder program surpassed all other levels of influence at the highest level of academic motivation on the belief students can be themselves. This research has shown that there is not one variable that is consistently influencing students’ beliefs about who or what influences their success. However, Pathfinders was comparatively less effective than other sources, particularly at the lowest two levels of academic motivation. Thus,
this particular program, as implemented at NHS, has not proven to have the wide range of impact administrators had originally hoped for.

When compared to teachers, family, and friends, the Pathfinder program was comparatively less effective than all other sources of influence, regardless of level of perception of school climate on the variables. For those participants who had the lowest perception of school climate, teachers were less influential than Pathfinders on NHS pride and less influential on their belief that NHS has an accepting and nonjudgmental atmosphere. This is extremely disappointing for several reasons. Teachers see students 5 days a week for nearly an hour every day, and have far greater opportunity than the Pathfinder program (45-55 minutes, once a month), to foster relationships, encourage, and assist their students. For students ranked in the second level of student perception of school climate, teachers were equally lacking in influence on NHS pride. Participants who fell within the third level of perception of school climate identified Pathfinders as more influential than family in the belief NHS has an accepting and nonjudgmental atmosphere. Teachers were only slightly more influential than family or Pathfinders at this level.

In general, friends were the most powerful source of influence, regardless of participants’ levels of academic motivation, as it related to the variables. However, there were exceptions. The exceptions included family and teachers being identified as more influential at the fourth and fifth levels of academic motivation on school satisfaction, and Pathfinders was more influential than friends in the belief that NHS has an accepting and nonjudgmental atmosphere at the fifth level of motivation. Family was equally or
more influential than friends on desire to graduate from NHS, regardless of level of academic motivation. Teachers were more influential than friends on desire to graduate from NHS, but only at the three highest levels of academic motivation. Also, teachers and family were more influential than friends on motivation to be a good student at the three highest levels of academic motivation. At the fourth level of academic motivation, family was slightly more influential than friends on the belief students are treated with respect.

This research demonstrated friends were also the most powerful source of influence on those students situated in the lowest two levels of perception of school climate, students’ school satisfaction, sense of belonging, Northwest school pride, desire to remain at NHS, academic motivation, desire to graduate from NHS, belief NHS had a nonjudgmental atmosphere, belief they can be themselves, and they are treated with respect. However, the influence of friends was similar to that of teachers and family at the third, fourth, and fifth levels of student perception of school climate. Thus, as students increased in their academic motivation and perception of school climate, the influence of their friends was more balanced by the influence of other factors.

Furthermore, at the lowest two levels of academic motivation and perception of school climate, students rated nearly every source of influence as less powerful than those at the third, fourth, and fifth levels. Conversely, students at the fourth and fifth levels of academic motivation and perception of school climate were more likely to credit every source of influence as exerting a powerful influence on the measured variables.

It is somewhat understandable the Pathfinder program was relatively ineffective, based on the amount of time students were exposed to it when compared with their
exposure to family, friends, and teachers. It is also not surprising that friends exerted such a powerful influence on their attitudes, based on what we know about adolescent development. However, it is disappointing that teachers were relatively ineffective in influencing students across the measured variables, particularly at the first two levels of academic motivation and perception of school climate. More research is needed to determine how mentoring programs, teachers, and family involvement can exert a more powerful influence on these students.

**Application of Current Research to This Study**

One of the liabilities of conducting an action research study is that I was implementing and researching simultaneously. Instead of approaching the problem in a linear fashion, I was approaching it in a multi-faceted way. Ideally, it would have been advantageous to modify the program as I became increasingly informed via my review of the literature, the observations I made, the feedback I obtained, and the data I collected. However, that was not possible with the Pathfinder program, partly because we had contracted with another agency to implement it and the majority of feedback was not collected until the end of the program’s first year of implementation. Having completed the research review and coming to a better understanding of why the program failed to reach the group of students it was most intended for, I would like to compare and contrast the most recent recommendations from the research with the characteristics of the Pathfinder program along several dimensions: infrastructure and program practices.
Infrastructure: Training, Support, and Supervision

Several authors have researched what constitutes an adequate amount of pre-program training. Herrera (1999) found training in both community and school-based mentoring programs to be similar in length (between 2 and 3 hours) and topics covered (communication, relationship-building, confidentiality, abuse recognition). In a subsequent study, Herrera et al. (2000) reported mentors who attended fewer than two hours of training reported the lowest level of relationship quality, while those receiving six or more hours of training reported the strongest relationships with youth. Spencer and Rhodes (2005) also found mentors who received less than two hours of training reported the least satisfaction with the quality of their matches. Herrera et al. (2007) reported high school Bigs receiving two or more hours of training experienced higher quality and closer relationships with their Littles and sustained longer lasting relationships. The Pathfinder program adequately met the standards recommended by the research regarding length and quality of training. The Pathfinder program conducted 5 hours of training and covered the following topics: program goals, icebreakers and team building activities, effective communication, active listening, confidentiality, classroom management, importance of authenticity and consistency, recognizing danger signs, and when and how to refer a student for adult intervention. Monthly training sessions were conducted each month to prepare mentors for the upcoming classroom connection topic. However, mentors were divided in two groups and trained separately. Not only did I observe the training varied slightly from group to group, the trainers presenting in a single classroom were not necessarily trained in the same group, preventing any planning, rehearsal and role
assignment from occurring. I assumed leadership for this program in its’ second year. As a result, ten teachers were included in the pre-program training and lesson planning. Subsequently, all monthly training was conducted in one session, allowing better consistency and planning. I continued to conduct monthly make-up training for absent mentors.

The amount of ongoing support provided to mentors has also found to correlate with the quality and length of the mentoring relationship. Herrera et al. (2000) found at least two hours of post match training or monthly contact with program staff fostered the closest and most supportive relationships. Karcher (2005) also found mentors who reported more contact with program coordinators felt more important and viewed their relationships more positively than mentors with little or no contact. Herrera et al. (2007) reported Littles (mentees) experienced larger benefits in five social and academic outcomes in programs that offered ongoing support and frequent communication with their mentors. Komosa-Hawkins (2009) recommends conducting monthly reflection meetings with program mentors. The Pathfinder program did not provide any ongoing support for the mentors during its’ first year of operation. Although the staff from Varsity Gold Leadership met with the mentors each month, the purpose of the meeting was to train the students for the upcoming classroom connection. Very little time was devoted to discussion and problem solving.

The Varsity Gold staff traveled to Northwest High School from out-of-town and was only available during the training day for a few hours. Although I was present for the training and assisted the Pathfinders in the special education and modified classes during
the classroom connections, I was taking a sabbatical leave during the first semester of the 2007-2008 school year and not available to students either. After assuming responsibility for the program in the second year, I held a discussion about the successes, problems, and ideas for improvement from the previous classroom connection at the beginning of each monthly meeting. In addition, I communicated to the Pathfinders a willingness to engage in individual discussion and problem solving regarding the program at any time, as I had returned to work full-time.

The role of supervision in the effectiveness of school-based mentoring programs has not been extensively researched. However, Herrera et al. (2000) speculated school-based mentoring may be advantageous to mentors because it reduces costs, provides structure, creates safety, allows for more cross-gender matches, and provides an opportunity for immediate staff-based assessment, intervention, and problem-solving. According to the mentors, the amount of supervision provided varied widely in the programs first year. Some mentors reported the sophomore English teachers introduced them, assisted with the lesson plan’s implementation, helped facilitate classroom discussion and participation, intervened if classroom management became problematic, and reinforced the lesson. Other mentors reported the teachers delayed their entry, limited their time, did not participate in any way, or left the room entirely. After assuming responsibility for the program, I met with the teachers prior to the classroom connection each month, provided them with a copy of the lesson plan, asked them to remain in the room and assist the mentors, solicited feedback each month, and provided suggested follow-up activities.
Program Practices: Focus, Matches, Frequency and Duration of Meetings

A great deal of the research on mentoring has focused on the characteristics of programs creating the highest quality relationships, producing and sustaining the most positive outcomes, and resulting in the most long-term relationships. Three attributes have consistently been influential: a focus on developmental versus prescriptive activities, flexibility and shared decision-making, and the element of fun. Morrow and Styles (1995) described developmental relationships as those that were based primarily on the mentors’ perceptions of the youths’ needs, focused on developing a reliable and trusting relationship, and placed a high value on enjoyment. Morrow and Styles (1995) described prescriptive relationships as those in which the mentor’s placed their goals above that of the mentee’s, centered on transforming the youth in some way, and placed a high value on perceived improvement. As reported earlier, developmental matches were much more successful than prescriptive matches in producing satisfying relationships to both mentors and mentees. Sipe (1998) found mentor approach to be the most critical factor in determining how effective and satisfying a match becomes. She reported mentors who focus primarily on their own agenda fail for exactly that reason. According to Sipe (1998) effective mentors are flexible, open, consistent, solicit ideas from their mentees’, respect the need for fun, communicate with families, and seek advice when needed. Herrera et.al. (2000), in her comparison of community and school-based programs, reiterated the strongest relationships formed were based on a developmental approach including shared decisions about activities, rather than those dictated by the mentor or program. Spencer and Rhodes (2005) report close emotional connectedness is
associated with empathy, authenticity, fun, and flexibility. Unfortunately, in its’ first year of operation, the Pathfinder was highly prescriptive, rather than developmental. It was rigid, rather than flexible. The content of the program was dictated entirely by the school and the organization we contracted with. Although most students reportedly enjoyed the program and thought it was fun, the most at-risk students consistently ranked it as ineffective as an influence on their academic motivation and perception of school climate. After assuming leadership of the program, we attempted to give students and teachers more voice and ownership for the program by abandoning the lesson plans provided by Varsity Gold Leadership. During the annual pre-program training day, we paired two teachers with a group of 15 Pathfinders each. The six groups then each chose the topic they wished to address and designed the lesson plans themselves.

The way in which programs match mentors with mentees vary a great deal. Sipe (1996) found cross-gender and cross-ethnic matches did not differ from same-gender and same-ethnic matches in closeness and supportiveness. However, Herrera et al. (2000) did find shared interests between mentors and mentees do contribute to relationship quality in an initial study, but did not find shared interests to be significant in a subsequent study (2004). Herrera et al.(2000) reported the age of the mentee had an impact on relationship quality. Mentors matched with youth in elementary school reported having closer relationships then those matched with youth in middle school or high school. Karcher (2005) studied cross-age peer mentoring and recommended matches be at least two years apart. According to Grossman and Johnson (1999), “Research has consistently shown that the mentor’s behavior is far more important to the success of the relationship than the
manner is which the match is made.” During the first year of operation, Pathfinders were divided by grade level (juniors or seniors) and listed alphabetically by last name. They were assigned to the sophomore English classes in alphabetical order such that an equal number of juniors and seniors were in each class, whenever possible. It wasn’t always possible because a greater number of seniors than juniors were mentors. They were then assigned as sets (a junior and senior) to a group of students in the class. They remained with the same group during each classroom connection. Some groups of Pathfinders knew each other well, while others did not. The sophomores’ perception of the level of their Pathfinder mentors preparedness, organization commitment, and sincerity varied a great deal. One unforeseen complication was that many students changed their schedules at the beginning of the second semester, resulting in a reconfiguration of which students were in their sophomore English classes. Although the mentors and student groups were reassigned, the schedule changes disrupted the relationships and continuity of the program. In the second and third years of the program, the next years junior mentors were recruited primarily from their sophomore English classes; so students from modified, regular, and accelerated classes would be working with ability-level peers. Also, schedule changes affecting the sophomore English classes were minimized.

The frequency and duration of mentor-mentee meetings reported in the literature has ranged from a maximum of 4 hours a week (Tierney et al., 2000) to a minimum of 1 hour every other week (Herrera et al., 2002). In her comparison of school-based versus community-based programs, Herrera et. al. (2000) found mentors who spend more time with youth reported feeling closer and more supportive. Yet, it was not as strong a
predictor of relationship quality as activities engaged in. When Herrera et al. (2002) investigated group mentoring, she found meeting frequency was not associated with how close the youth felt toward their mentors, although 63% of the youth preferred more frequent meetings. Karcher (2005) found mentee absenteeism might result in decreased mentee self-esteem and increased behavior problems. In her study of school-based BBBS programs, Herrera et al. (2007) reported high school Bigs (mentors) were less consistent than adults in attending match meetings. The Pathfinder program matched mentors and mentees less often than any research I found. It may be that meeting for less than an hour once a month was simply too little time to produce and sustain a meaningful relationship, particularly with youth most at risk of dropping out of school.

**Limitations to This Research**

1. The survey response was less than hoped for. This was due to the fact that the sophomore English teachers who distributed the survey placed differing amounts of importance and offered differing incentives for its’ return, despite the fact that I asked the English department chairperson to address this issue at a meeting with the department and standardize their approach to the survey.

2. The survey respondents were not a representative sample of the sophomore population. A majority (67%) of students who returned the survey were from the accelerated English 10 classes while 33% were from the regular or modified English 10 classes.
3. Although I based my findings on the data collected, it may be the conclusions are not valid because the sample was not representative and the response was limited.

**Conclusions**

Although the majority of students reported enjoying the Pathfinder program, it was relatively ineffective on students with low levels of academic motivation and with those who perceived the school climate negatively. It is noteworthy that students with the highest levels of academic motivation rated the Pathfinder’s influence on their sense of belonging, desire to remain at NHS, desire to graduate and motivation to be good students equal to that of other factors. At high levels of academic motivation, Pathfinders equaled or exceeded the power teachers, family, or friends had on the belief that NHS has an accepting and nonjudgmental atmosphere and on the belief that students can be themselves. Despite the concept that one of the developmental goals of adolescence is to achieve individuation and independence, it is important to note family continued to exert a powerful influence on students’ attitudes toward school. At low levels of academic motivation and with those who perceived the school climate negatively, it is disappointing teachers were relatively ineffective on students attitudes toward school. The research review indicates mentoring has the potential to have a positive impact on students’ attitudes toward school. However, based on this research of the Pathfinder program at Northwest High School, my recommendation was to discontinue the program
under its’ present structure. The program was discontinued prior to the 2010-2011 school year.

If I were to reinitiate a mentoring program, it would have an entirely different design. Based on what I learned from my analysis of the Pathfinder program, any subsequent program would not be directed to the entire sophomore class. I would ask the feeder school’s (junior highs) teachers and counselors to recommend at-risk students (based on the characteristics from my literature review) for inclusion in the program. I would recruit mentors in the Spring and invite the recommended junior high students to participate in a “meet and greet” party at the junior high. I would have high school mentors explain the program, discuss some of the planned activities, and invite the 9th graders to sign up for the program. I would require both mentors and mentees to complete an interest survey and use the results to make matches. I would insure a two-year commitment to the same mentees from the junior mentors. I would provide a minimum of two hours of pre-program training and meet monthly with the mentors. I would offer the mentors credit and organize the activities after school at least once a week, for a minimum of an hour. There would be a variety of activities (arts & crafts, intramural sports, board games, homework help, and a book club) to choose from and the decision to choose any one activity each week would either be mutual or involve taking turns. The focus of the mentoring program would be developmental and the activities would be designed to be fun. I would include an experimental and control group, validate any survey used, and utilize a pre-post test design.
Recommendations

As data presented in my review of the literature revealed, school-based mentoring using a peer and co-mentoring group approach has the potential to make an effective difference in the lives of at-risk youth. However, my suggestions to maximize the success of any such program are:

1. Identify students at-risk by fourth grade, communicate their status from each year to the next, track their progress carefully, and develop and implement research-based strategies to enhance their achievement.

2. Measure the number of internal and external assets at-risk students have each year and set specific and measurable goals to increase these assets, both in and out of school.

3. Improve communication with family members of at-risk youth and encourage their involvement in designing and implementing a plan to enhance their children’s academic success.

4. Provide at-risk youth with high quality teachers, whenever possible. Provide increased staff training and merit pay to these teachers. Help them understand the importance of cultivating and maintaining a nurturing and caring relationship with these students.

5. Utilize a developmental, rather than prescriptive, approach.

6. Adhere closely to the research recommendations regarding the infrastructure (training, support, and supervision) and program practices (focus, matching, frequency and duration of meetings) in designing any mentoring program.
7. Conduct further research to determine the optimal way to organize and conduct a school-based mentoring program using a peer and co-mentoring group approach.
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APPENDIX 1

Pathfinder Program: Teacher Referral
Our school has chosen to implement a student-to-student mentoring program called Pathfinder, which you may have heard about through your department chairs. The program has been chosen because of its’ potential to engage our incoming students through the influence of personal relationships with positive older students.

Pathfinder will provide incoming sophomores with the support and friendship of a junior or senior who will build friendships, encourage involvement, and promote academic success. Mentors will meet with sophomores in small groups on a monthly basis. The key to success lies in the quality of mentors selected.

Therefore, we are seeking your assistance in referring students you have worked with who you can endorse as positive, responsible, and caring with leadership potential. These students should be at least average academically. We are hoping for a diverse representation of students. Some of the characteristics we would like you to consider are the ability to communicate with others, friendliness, maturity, and follow-through. Please recommend 5 students. If you teach mixed classes, we would appreciate it if you would recommend at least 3 incoming seniors and 2 incoming juniors to us.

**Mentor Nominations:**

_________________________________________________________________
_________________________________________________________________
_________________________________________________________________
_________________________________________________________________
_________________________________________________________________

Thanks for your help. Please return this form to Jan Downs by Wednesday, May 23rd.
APPENDIX 2

Pathfinder Mentor Application and Consent Form
Pathfinder Mentor Application and Consent Form

Name: ___________________________      Grade Next Year: ______________
Address: ___________________________       Home Phone: ___________________
Cell Phone: ___________________________       Email: _______________________

Reasons for wanting to be a mentor: ________________________________
________________________________________________________________________
________________________________________________________________________
________________________________________________________________________

A mentor or leader you admire and why: ________________________________
________________________________________________________________________

Please rate yourself in these areas with 1 as poor, 5 as average, & 10 as high.

Communication skills with peers:  1  2  3  4  5  6  7  8  9  10

Communication skills with adults:  1  2  3  4  5  6  7  8  9  10

Ability to get projects done effectively:  1  2  3  4  5  6  7  8  9  10

Organization skills:  1  2  3  4  5  6  7  8  9  10

Parental Consent: I understand that as a Pathfinder mentor, my student is making a year-long commitment to mentor a team of incoming students. I also understand that my student is required to attend the mentor training from 10 to 3 on Thursday, August 23rd, at Northwest, and subsequent training sessions, which may result in occasional loss of class time. I give my consent for my student to participate in the Pathfinder Program.

Parent Signature: ________________________________

Return this form by Wednesday, May 30th, to the counseling office!
APPENDIX 3

Pathfinder Mentor Congratulations
Pathfinder Mentor Congratulations

Congratulations! You have been chosen to be a member of Northwest High’s Pathfinder Mentor Team. We are excited to have you on board for a year of fun, learning, and personal growth. You have been chosen because you are a strong role model, possess leadership ability, and stand out as a student who cares about your school and the students in it. We are confident that your involvement and service to our incoming sophomore class will have a significant impact on their transition to senior high school.

We want to promote a school atmosphere of high expectations, acceptance, tolerance, and mutual respect. You can help us to accomplish that. Please mark the following dates on your calendar and plan to attend our mandatory Mentor Training.

**Pre-Program Mentor Training**

**Date:** Thursday, August 23rd

**Time:** 9:45 a.m. to 3:00 p.m.

**Place:** Boise Friends Church (next to Northwest, across from American Subs)

**Lunch will be provided.**

Thanks so much for your help. Your journey as a Pathfinder mentor is about to begin.

Jon Ruzicka, Principal

Jan Downs, Counselor
APPENDIX 4

Parent Consent Form
Dear Parent or Guardian,

A. Purpose and Background
   I, Jan Downs (Northwest High counselor and Boise State University doctoral student in Education Curriculum and Instruction) am conducting a study titled “Assessing the Value of Implementing a High School Mentoring Program”. I would like to involve your child in this study.

B. Procedure
   This study is aimed at assessing to what extent, if any, implementing a sophomore mentoring program has had on your son or daughter’s perception regarding school satisfaction, sense of belonging, academic achievement, and desire to graduate over a seven month period.

   This study involves your son or daughter completing an eighteen-item survey in March. You will find the most recent draft of the survey attached. The survey will be given in your student’s English 10 class and will not take over 20 minutes. After the surveys are analyzed, your child may be asked to participate in an interview with four other students who responded similarly. You will find the interview questions attached. This interview will take place at school and will not last over forty-five minutes.

C. Risks/Discomforts
   All information will remain confidential. Student identification numbers, rather than names, will be used for the survey. If your student is interviewed, he or she will not be identified by first or last name in any publication of the study’s results.

   You are able to remove your child from this study at any time. Your child may discontinue their participation in the survey or interview at any time, without penalty of any kind. Your child may also refrain from answering any items or questions that cause them discomfort. If they are interviewed, the interviews will be videotaped and recorded verbatim, but their confidentiality will be protected. Each student will be given a card with a pseudonym (fake name) placed in front of him or her. They will be referred to by the pseudonym only.

   If you or your child ask not to participate in this research or fail to return the consent form, his or her English 10 teacher will be notified. On the day of the survey, they will remain in class and be given an educational appropriate activity of roughly the same length.
Some of the items you or your student may be asked to respond to may create some negative feelings such as:

- Recalled grief over you or your child’s past difficulty/failure/ frustration with school
- Perceived stigmatization over discussing such matters in a videotaped interview, even when pseudonyms are utilized
- Aggressiveness arising from perceived anger and frustration at the school system or individual members of the school district from you or your student’s perception of the school system’s inability to understand, meet, and respond to your student’s needs
- Self – doubt created by the perceived differences in between you and/or your student and those perceived as being more successful
- Depression over a perceived sense of isolation, lack of belonging, or lack of success in school
- Isolation due to depression, lack of belonging, or lack of success in school
- Suicidal ideations due to depression, lack of belonging, or lack of success in school
- Feelings of rejection due to depression, lack of belonging, or lack of success in school
- Feelings of failure due to depression, lack of belonging, or lack of success in school

Should any of these feelings occur as a result of participating in the survey, four counselors at Northwest High will be available to discuss these feelings and refer you and/or your student for additional help, if necessary.

D. Confidentiality

Participation in research may involve a loss of privacy. However, my records will be handled as confidentially as possible. The only person who will have access to the surveys will be me, the principal investigator. If your child is interviewed, the notes and recordings (during and after analysis) will be kept in a locked filing cabinet. No one will see or hear them but me. The survey data, the notes, and the recordings will remain locked up for three years (per federal regulations) and then destroyed. No individual identities will be used in any reports or publications that may result from this study.

E. Benefits

There will be no direct benefits to you or your child from participating in this study. However, the information gained from this research may help education professionals understand how students’ view school and whether a high school mentoring program affects their views. Furthermore, results from this study may help us to improve educational practices and improve the mentoring program.

F. Costs:

There will be no cost to you or your child as a result of your child taking part in this study.

G. Questions

The Boise State Institutional Review Board has reviewed this project for the protection of human subjects in research. If you have any questions or concerns about
participation in this study, please contact me (Jan Downs) at Northwest High School (208) 854-4499 or by email at jan.downs@boiseschools.org. If for some reason you are reluctant to do this, you may contact the Institutional Review Board at Boise State, which is concerned with the protection of volunteers in research projects. You may reach the board office between 8:00 a.m. and 5:00 p.m. by calling (208) 426-5401 or by writing: Institutional Review Board, Office of Research Compliance, Boise State University, 1910 University Drive, Boise, Idaho, 83725-1135.

Should you or your child feel discomfort due to participation in this research, you may discuss it with any of the counselors at Northwest High, including me.

H. Consent

Participation in research is voluntary. I understand I can choose not to have my child participate in this study and I can withdraw my child from participation at any time. Declining or withdrawing participation will not interfere with my child’s education or learning experiences at Northwest High. I understand that by not participating my child will continue to receive developmentally appropriate activities and opportunities. I also understand that at any time, I can participate in parent activities and educational opportunities.

Failure to return the form will be taken as a lack of consent. If I choose to allow my child to participate, I will be given a copy of my signed consent form, if requested.

I give my consent to allow my child to participate in the survey.

_____________________         __________________________   __________________
Print Name                                 Sign Name                                     Date

I give my consent to allow my child to be interviewed, videotaped and recorded.

_____________________         __________________________   ___________________
Print Name                                 Sign Name                                      Date

Parents,

Please explain this research study to your son or daughter. They are welcome to read my letter to you, if you wish. I also need their assent to include them in this research.
Dear student,

I, Jan Downs (Northwest High counselor and Boise State doctoral student in Education Curriculum and Instruction) am conducting a study called “Assessing the Value of a High School Mentoring Program”. This study is aimed at assessing what effect, if any, implementing a sophomore mentoring program (Pathfinders) has had on your perception regarding school satisfaction, sense of belonging, academic achievement, and desire to graduate over a seven month period.

You will be asked to complete a 20 minute survey. You may be asked to participate in a follow-up interview of 45 minutes, along with 4 other students who answered similarly. You may refuse to participate, withdraw from participation at any time, or skip any questions that make you feel uncomfortable. If surveyed, you will not be identified by name (only student identification number). If interviewed, you will be videotaped and your responses recorded. However, neither your first or last name will be used in any paper or publication that results from this study.

By signing below, you are agreeing to participate with the understanding that your parents have already given their permission. You are under no obligation to participate. It is completely voluntary. If you choose not to participate, it will not affect your status as a Northwest High student in any way.

If you have questions concerning this research study, you may put in a call slip to discuss it with me, call me at (208) 654-4499 or email me at jan.downs@boiseschools.org. If you agree to participate, please sign below.

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<th>Print Name</th>
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<td>I agree to participate in the survey.</td>
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<td>I agree to be interviewed, videotaped, and recorded.</td>
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Please return this form to your parents to be mailed to me in the postage-paid and addressed envelope provided. Thanks so much for your help.

Jan Downs
APPENDIX 5

Pathfinder Mentor Experience Survey
Please note: Your participation in this survey is completely voluntary. You may choose to refrain from answering any items that cause you discomfort and may also discontinue your participation in this survey at any time. This survey is aimed at assessing your level of personal satisfaction with Northwest High School and the value of the Pathfinder mentoring program. If you choose to participate in this survey, please put your student I.D. number at the top of each Scantron form. Then, please rate the following statements with a 1 indicating “Not At All” and a 5 indicating “Very Much” by filling in the circle on the red Scantron sheet that best indicates how you felt in September and on the green Scantron sheet that best indicates how you feel now. If your feelings have changed (for better or worse), please rate the level of influence the following factors have had on your change of opinion by rating each of them on a 1 to 5 scale with 1 being “very little influence” and 5 being “very much influence.” For example, if two factors were equally influential, they could both be 4's. Please answer each item honestly. Thank you for your participation.

1. My level of personal satisfaction with Northwest is very high. (September-red, Now-green)
   (Rate each 1-5) Due to my: Friends__ Family__ Teachers__ Pathfinders__ Other__
   (What Other?______________).

2. I feel a sense of belonging at Northwest High. (September-red, Now-green)
   (Rate each 1-5) Due to my:
   Friends__Family__Teachers__Pathfinders__Other___(What Other?______________).

3. I am proud to be a Northwest High student. (September-red, Now-green)
   (Rate each 1-5) Due to my:
   Friends__Family__Teachers__Pathfinders__Other___(What Other?______________).

4. I wish I attended a different high school. (September-red, Now-green)
   (Rate each 1-5) Due to my:
   Friends__Family__Teachers__Pathfinders__Other___(What Other?______________).

5. Northwest High has an accepting and non-judgmental atmosphere.
   (September-red, Now-green)
   (Rate each 1-5) Due to my:
   Friends__Family__Teachers__Pathfinders__Other___(What Other?______________).

6. I would drop out of school if I could. (September-red, Now-green)
   (Rate each 1-5) Due to my:
   Friends__Family__Teachers__Pathfinders__Other___(What Other?______________).

7. I am motivated to be a good student. (September-red, Now-green)
   (Rate each 1-5) Due to my:
   Friends__Family__Teachers__Pathfinders__Other___(What Other?______________).
8. I feel that I can **be myself** at Northwest High. (September-red, Now-green).
   (Rate each 1-5) Due to my: Friends__Family__
   Teachers__Pathfinders__Others__(What Other?____________).
9. I feel **appreciated and cared about** by the faculty at Northwest High.
   (September-red, Now-green)
   (Rate each 1-5) Due to my:
   Teachers__Counselors__Administrators__Pathfinders__Other__(What Other?______).
10. I get **made fun of a lot** at Northwest High by other students. (September-red, Now-green)
   (Rate each 1-5) Due to my:
   Friends__Family__Teachers__Pathfinders__Other__(What Other?____________).
11. I feel like I **“fit in”** at Northwest High. (September-red, Now-green)
   (Rate each 1-5) Due to my:
   Friends__Counselors__Teachers__Pathfinders__Other__(What Other?____________).
12. I **hate school**. (September-red, Now-green)
   (Rate each 1-5) Due to my: Grades__Teachers__Counselors__Administrators__No
   Friends__Other__(What Other?___________)
13. People at Northwest **compliment me** when I have improved or done well.
   (September-red, Now-green)
   (Rate each 1-5) Including my:
   Friends__Teachers__Counselors__Pathfinders__Other__ (What Other?_________).
14. I am **treated with respect** at Northwest High. (September-red, Now-green)
   (Rate each 1-5) By my:
   Friends__Teachers__Counselors__Administrators__Other__ (What Other?__________).

Please rate the following items using the same 1 to 5 scale you have been by circling
the response that best indicates how you feel on the (Now) **green form only**.

15. I understood the purpose of the Pathfinder activities.
16. I enjoyed having juniors and seniors take an interest in me.
17. I felt the Pathfinders were well-prepared.
18. My English teachers supported the lesson by discussing it with us afterward.

**Please return your Scantron sheets to your teacher. Teachers: Please bind them
with a rubber band & return them to Mrs. Williams in the counseling office.**
APPENDIX 6

Sophomore Pathfinder Mentor Experience Survey
Please note: Your participation in this survey is completely voluntary. You may choose to refrain from answering any items that cause you discomfort and may also discontinue your participation in this survey at any time. This survey is aimed at assessing your level of personal satisfaction with Northwest High and the value of the Pathfinder mentoring program. If you choose to participate in this survey, please answer each item honestly. Your feedback is valuable to us. Put your student identification number in the line provided. Under each item, please circle the number of the response that best describes how you feel. Thank you for your participation.

Student Identification Number:__________________________

Part 1: Personal Satisfaction

1. Compared to September, my sense of personal satisfaction with Northwest High is:
   Much Lower  Lower  The Same  Higher  Much Higher
   1           2          3              4         5
2. Compared to September, my sense of personal belonging at Northwest High is:
   Much Lower  Lower  The Same  Higher  Much Higher
   1           2          3              4         5
3. Compared to September, my sense of pride to be a Northwest High student is:
   Much Lower  Lower  The Same  Higher  Much Higher
   1           2          3              4         5
4. Compared to September, my desire to attend a different high school is:
   Much Lower  Lower  The Same  Higher  Much Higher
   1           2          3              4         5
5. Compared to September, my belief that Northwest High has an accepting/non-judgmental atmosphere is:
   Much Lower  Lower  The Same  Higher  Much Higher
   1           2          3              4         5
6. Compared to September, my desire to drop out of school is:
   Much Lower  Lower  The Same  Higher  Much Higher
   1           2          3              4         5
7. Compared to September, my motivation to be a good student is:
   Much Lower  Lower  The Same  Higher  Much Higher
   1           2          3              4         5
8. Compared to September, my sense that I can be myself at Northwest High is:
   Much Lower  Lower  The Same  Higher  Much Higher
   1           2          3              4         5
9. Compared to September, my sense of being appreciated and cared about by the faculty at Northwest High is:
   Much Lower  Lower  The Same  Higher  Much Higher
   1           2          3              4         5
10. Compared to September, my **sense of being respected** by other students at 
Northwest High is:

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11. Compared to September, my **sense of being respected** by the faculty at 
Northwest High is:

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12. Compared to September, my **sense of “fitting in”** at Northwest High is:

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13. Compared to September, my **level of discouragement** with school is:

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14. Compared to September, my **confidence in graduating** from high school is:

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15. Compared to September, my **confidence that I will be prepared for college** is:

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**Part 2: Pathfinder Mentor Program**

1. I **enjoyed the Pathfinder activities** in my English class:

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2. I **enjoyed having juniors and seniors take an interest** in me:

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3. I **understood the purpose** of the Pathfinder activities:

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4. I felt the **Pathfinders were well-prepared**:

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5. My **English teacher reinforced the Pathfinder activity** by discussing it with us 
afterward:

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Part 3: Factors of Influence on Me.
Please rate the level of influence each factor listed has had on the concept in bold letters by circling the number that best indicates that factors importance to you:

1. Personal Satisfaction with Northwest High:

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2. Sense of Belonging at Northwest High:

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3. Pride in Being a Northwest High Student:

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4. Desire to remain at Northwest High:

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5. Belief that Northwest has an Accepting and Nonjudgmental Atmosphere:

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6. Desire to Graduate from Northwest High:

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7. **Motivation to be a Good Student:**

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8. **Belief that I can be Myself at Northwest High:**

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9. **Belief that I am treated with Respect:**

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10. **Belief that I will be well-prepared for College:**

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Thanks again for your participation!
APPENDIX 7

Pathfinder Lesson Plan: Including Others
Objective: To encourage students to look for ways (be creative) to include others.

Materials: Masking tape.

Set Up Phase: (5 minutes)

Mentor Note: Inform the teacher ahead of time that the room will be rearranged during this session, but that you will ensure that it’s back to normal before you leave.

- Ask the younger students to help you clear a large open space in the room.
- Now have them form groups of four (they will most likely form groups around the closest relationships. But that’s okay, they won’t be there long).
- Now give each group 4 lengths of masking tape and have them box themselves in. The size of the squares will depend on the lengths of tape you use and it’s okay to mix it up a bit and have some boxes bigger than others. Just make sure that the tape is long enough to allow the group to easily stay within the box.
- Before you move on, have the group members introduce themselves and share something about themselves…what they ate for breakfast, favorite color, sport, movie…whatever comes to mind.

Activity Phase: (12-15 minutes)

Activity: Cliques

- Instruct the group that when you say “change”, each person will leave the square he’s in and find a new square to occupy (*Important: feet must be totally inside the tape).
- Once the students have found a new square, and both feet are inside the boundary, ask the group another captivating and thought-provoking question from the list below.
- Follow this pattern for a couple of more rounds (change circles, make sure feet are inside the boundaries, read a question and have the group members share) while carefully watching the interaction between the group members. (Mentor Note: What do you notice about the groups they’re forming? Do they always gravitate toward the same friends?)
- Before the fourth round (or third, or fifth, whenever you’re ready), remove one box from the floor before you call change. Call change and continue to watch the interaction.
- As the boxes become more cramped, still insist that feet are inside the box. Be sure to still ask the groups questions and give them time to answer.
- Continue removing boxes for each remaining round. Since you will still insist that feet are within the boundary, safety may become an issue. So don’t allow them to lift anyone off of the ground.
• Encourage and challenge them to think creatively in order to keep feet inside the boundary.
• Continue until there are approximately 2-3 boxes left (depending on the size of the class).

Questions for Sharing:
• Who are the members of your immediate family?
• What would you do with a million dollars?
• If you could be the principal, what rule would you change?
• What is your favorite food?
• What would you consider the perfect vacation?
• What’s the first thing you do when you get home from school?
• What is your easiest/hardest class?
• What is the best gift you’ve ever received?
• Think of your own.

Discovery Phase: (5 minutes)
Here’s where you split into your individual teams to discuss the questions below. Add or change any questions that you feel you need to.

What Happened? (Talk about your group’s experience)
• How did you decide the first group to be in?
• What was comfortable about this group?
• What happened when you had to change squares? How did you decide which square to go to?
• What happened when you were matched with those you didn’t know as well? Was it uncomfortable? Why?
• Did you ever invite newcomers into your square?
• What happened when squares were removed?
• What happened to the groups as the squares became more cramped? What did you have to adjust?
• How many feet were you able to get into one square successfully? What did it take to do this? Were there ideas you had that you didn’t share? Why not?

What Does It Mean? (Talk about what can be learned)
• Have you ever seen others on the outside looking in, or have you been in this position yourself? What was it like? What did you do?
• What happens when people feel included?
• In order to make room for others, what do you have to do?
• What would happen if everyone in this school felt included? Is that possible?
Challenge Phase: (5 minutes)

- Ask the group to share as many ways as they can think of to include others at school (picking new people in P.E., inviting someone to sit with you at lunch).
- If the group members are having a difficult time getting involved, go around the circle and ask each student to share (or pass if necessary).
- When finished going around the circle, ask the group to silently pick one person (not in your group) that they will include in an activity this next week.
- If there is time you can ask your group members to share who they thought of and how they will include that person (always give them the option of passing).

Mentor Challenge: This week, think of a way you can include younger students from your group to be a part of something you do.
APPENDIX 8

Pathfinder Lesson Plan: Gossip
**Objective:** To illustrate that news is easily distorted and challenge students to confront and end gossip when they hear it.

**Materials:** Paper and pencil for each group.

**Set Up Phase: (5 minutes)**

After your class introduction, move directly into the subject of gossip by asking the entire class to define it (compare their version to formal definitions that include “revealing the secrets or personal information of others” and that it is often malicious).

- When everyone is on the same page about what gossip is, ask the class to respond to this question:
  - What is harmful about gossip?

- Use the answers from this question to segue into a mentor volunteer sharing his/her own story about how he/she has been affected by gossip, or how he/she has seen others hurt by gossip (allow yourself to be open and authentic…this will contribute to further sharing by students later).

**Mentor Note:** There is not a single person who is not affected by gossip in some manner. Therefore, this tends to be an issue that students talk about easily…especially if you have established relationships and trust within your group. For that reason, you may want to consider passing on the activity portion and spend the rest of your time openly talking with your students and hearing from each other.

**Activity Phase: (10-12 minutes)**

**Activity:** Snap Shot

Ask the class to get into their individual teams (While the teams will function individually, they will stay in the same area for the activity).

- Ask the teams to line up single file, facing the back of the room.
- Explain that you are going to draw a simple picture up on the board behind them (bird or house works well). When you say “go”, the student sitting closest to the drawing will turn around and will have ten seconds to study the picture.
- When 10 seconds is up (they can only look at the picture once), the student will turn around and draw the object on the back of the person in front of him (fingers only please!), who will pass it on in the same manner until the last student in the line will draw the final result on a piece of paper (ensure that the last person is provided with paper and a pencil).
- When all groups are finished, ask those students to come up to the front of the room to display the resulting works of art.
Mentor Note: Allow the group members to make comments about the results before breaking off for the Discovery Phase with your individual teams.

Discovery Phase: (5-8 minutes)
Use the questions below to help your group process what happened during the activity. Feel free to add your own questions.

Mentor Note: The students in your group are sharp and will most likely make a connection to gossip very quickly. If this happens, the below questions in the “what happened” portion may not be necessary because they will be able to talk about what it means...if so, let them go for it.

What Happened? (Talk about what your group experienced)
- How did that go?
- What happened as the drawing got passed on down the line?
- How was the final picture similar to the original? Was it close enough to pass as the original?
- How was the final picture different?

What Does It Mean? (Talk about what can be learned)
- How is this activity like gossip?
- How does gossip get spread? Why does it get spread?
- How have you been affected by gossip?
- How have you seen others (relationships, trust) affected by gossip?
- What happens to trust when gossip is spread and believed?
- Is it always unhealthy to talk about other people? If not, when does it become unhealthy?
- What should be done about gossip?

Challenge Phase: (5 minutes)
When you’re finished with your group discussion, ask the group members to go around the circle and finish this sentence (make up your own sentence if you don’t like this one): “When I hear gossip I will...”

Mentor Note: It’s always okay for students to pass. Allowing them to have control over this will generally build trust in you. But, don’t be afraid to follow up with students that don’t share either and let them know what you appreciate about them, or ask them to share just with you.
APPENDIX 9

Pathfinder Lesson Plan: Diversity
Objective: To encourage students to take time to get to know others before making snap judgments.

Materials: Paper, pencils, 5-6 various empty containers per class (coffee can, cereal box, CD case, game box, crayon box, aspirin bottle...). Also, you will need material to put inside these containers that is different than what the container implies (noodles, rice, sugar, ping pong balls, picture of a person/landscape...). However, you may keep the actual ingredients in one container...sometimes our assumptions are accurate.

Coordinator Note: This session requires a significant amount of props. However, with advance planning it shouldn’t be difficult for you to obtain these items for each class. We encourage you to recruit the help of teachers to collect items for their classrooms. It’s a lot easier for one person to collect 5-6 items than it is to multiply that by all the classes in which you place mentors.

Set Up Phase: (2-3 minutes)
Prior to going in to the class, ask one member of your mentor team to be ready to share a personal story during the Activity Phase of one of the following:
- A time when the mentor met someone who ended up being entirely different than he/she previously assumed. He/She can share how that experience made an impact on him/her.
- A time when he/she experienced being judged prematurely and how that affected him/her. While one mentor from your group greets the class, the others should be setting the containers up in front of the class (items already inside) in a display fashion.

Activity Phase: (10-14 minutes)
Activity: What’s Inside?
With the items in full view of the class, ask the students to:
- Write down, in order from left to right, what is inside each container.
- Work in silence until everyone is finished.

Mentor Note: If students ask questions, try to answer them by repeating the directions. Avoid giving any solutions.
- When each student is finished, ask the class to share their answers.
- When you’re ready, reveal the contents of each of the containers. Respond to any comments that the class has.
- Here is where the volunteer mentor can share his/her story.
- When finished, split into your individual teams for the discovery phase.
Discovery Phase: (5-7 minutes)
Use the experience above and the questions below to facilitate learning. Please add your own questions or observations based on your group’s experience.

What Happened? (Talk about your group’s experience)
- Was anyone able to guess the contents correctly? Why or why not?
- What were your reactions when the contents were revealed?
- What could you have done to make the activity easier on yourself?
- Was anyone tempted to get up and look inside the containers? Why did, or didn’t you?
- How would it have made a difference if you looked inside?

What Does It Mean? (Talk about what can be learned)
- What does this activity show you about people?
- How do you get to know people?
- What happens when we judge others too soon?
- Do you ever “look inside” someone (get to know them first) before coming to a conclusion?
- Have you ever been pre-judged? What is that like? Why does that happen?

Challenge Phase: (5 minutes)
When you are finished with the questions, ask the group members to go around the circle and sum up the point of today’s session verbally, and ask them to share how they resist judging others too soon, or how they will help their friends resist judging others too soon.
APPENDIX 10

Pathfinder Lesson Plan: Honesty
**Objective:** To challenge students to increase their personal standard of honesty and integrity.

**Materials:** 1 ball per team of 10+ members, pencil, scratch paper.

**Set Up Phase: (5-10 minutes)**
Welcome the class as a large group and then split them into smaller groups.

**Two Truths and a Lie:**
- Ask each person to think of three things about themselves…two that are true and one that is a lie.
- If the group members are struggling to think of anything, give them some ideas…how many brothers and sisters, favorite foods, places they’ve been, pets…
- Go around the circle and have each person share the three things, and explain that the others will try to guess which is the lie.
- Once the members have made some guesses, ask the person who shared to reveal the actual lie.
- When everyone has shared who want to, move on to the following questions:
  - What was it like trying to figure out which was the truth? Was it easy? Hard?
  - Which is easier to come up with, truths or lies…Why?

**Activity Phase: (10 minutes)**

*Activity: Fireball*
This activity is best played with 10+ participants. Join with another team and form one circle if necessary. Explain the following:
- This is a game of honesty where you will play a simple game of catch, but…(emphasize these guidelines as you share them):

**Guidelines:**
- In this game, players may not speak.
- Players are not allowed to move except to throw or catch the ball.
- Players cannot make a bad throw or catch.
- If any player believes he has broken one of the rules, he will remove himself from the game by taking one step back and kneeling on one knee.
- **Important:** Do not define the rules for the players. If they ask, just say, “It is up to you and only you”.
- Stress the point that it is an individual’s choice to kneel down.
Ask if the group is ready, revisit any rules that are needed, and then simply begin by tossing the ball to someone in the circle, and have them continue to someone else.

- Keep going until there are 2-4 players left.
- You may play more than once.

**Discovery Phase: (5 minutes)**
Split back into your individual groups to discuss the questions below. Feel free to add your own questions.

**What Happened?** (Talk about your group’s experience).
- What were the reasons you kneeled down?
- If you sat down, did you lose?
- Should someone have sat down that didn’t? What was your response?
- What were the different definitions of the rules?
- Did you ever second guess yourself? If so, what made you decide the way you did?

**What Does It Mean?** (Talk about what can be learned).
- How does this game stress honesty?
- Describe a time when you have been tempted to compromise your level of honesty?
- What do we gain with dishonesty? What do we lose?
- What do we have to gain from being honest? What do we risk by being honest?
- Which makes the biggest difference in the long run, gains from dishonesty or from honesty? Why?

**Challenge Phase: (5 minutes)**
Hand out paper and pencils and ask the younger students to respond to one of the following areas by answering the question, “How will you increase your level of honesty in this area?”
- School/Classes (tests, homework…)
- Parents
- Friends

Ask the group if they’d like to share their responses. Try to hear from everyone but still allow for students to pass if they want.

When finished, encourage them to follow through with their commitment, and conclude this session.

*Mentor Note:* Don’t forget to follow up with those who made commitments to increase their level of honesty. It will really help cement those decisions!
APPENDIX 11

Pathfinder Lesson Plan: Conflict Management
Conflict Management
Pathfinder Mentors Notes

Objective: To assist students in creatively seeking win-win solutions when conflict surfaces.
Materials: None.

Set Up Phase: (8-10 minutes)
Choose a mentor who will be ready to lead the large class through the set up phase.

Forced Choice:
- Split the room in half with an imaginary line and clearly establish a right and left side.
- Explain that you will call out two options. Each participant will try to determine which option they identify with the most.
- Those who identify with the first option will go to the left. Those who identify with the second option will go to the right (this was obvious, wasn’t it?).
- No one may remain neutral. They will either be on the right or the left. Give the first couple on the list as examples.

Mentor Note: If you’re not leading, you should be participating.
- When the group is evenly split between the two sides (or close to it), ask each side to defend why they are on the “correct” side, even to the point of persuading the other side to cross over.

Choices:
- Adventurous/Safe
- Cat Person/Dog Person
- Aggressive/Passive
- Listener/Talker
- Night person/Day Person
- Cooperative/Competitive
- Salad/Steak
- Work/Play
- Leader/Follower

Feel free to add your own.

- When finished, break up into your individual teams and talk about their experience.
- Ask:
  - Were you able to convince others?
  - What does it take to convince others?
  - What happens when you have two people who have opposing opinions?
  - Conflict is present anytime one disagrees with another, or has an opposing opinion. Conflict isn’t wrong in itself, it’s how we manage conflict that shapes our ability to seek and find win-win solutions.
Activity Phase: (5-8 minutes)
Activity: Arm Wrestling

- Ask each member to find a partner and get in the arm wrestling position.
- Tell them that you are going to give them one minute, and their objective is to see how many times they can touch the back of their partner’s hand to the surface.
- Then quickly get clarification that they understand and say “go” so they don’t have a whole lot of time to think about it.
- When one minute is over, split into your individual teams for discussion.
APPENDIX 12

Pathfinder Lesson Plan: Respect
Objective: To increase the awareness of others and build the value of treating others with high regard apart from one’s perceived status at school.

Materials: One 3” x 5” card per student with a number on it. Starting with 1, write a number between 1 and 10 on each card. When you reach 10, start again with 1 until you have enough cards for every student in the class (if there are 30 students, each number between 1 and 10 will be represented three times).

Set Up Phase: (5 minutes)

- During the monthly training, select one mentor to lead the activity phase. Be sure to practice the scenario (see below) so you know what you’re going to say.
- Greet the class as a large group and reintroduce yourself in an enthusiastic way.
- Before you begin, ask the class how they see students being treated at school.
  - Is everyone treated the same?
  - How do you think we decide how we are going to treat people?
  - Why is there a difference? Try to get multiple responses and get them thinking on the subject of respect.
- Ask the students to help define respect. After a few attempts you may want to add the following definition: “To consider worthy of high regard.” Or in other words: “To choose to assign value.”
- Example: If one respects his teacher…he considers the teacher worthy of value. What he/she says is important, and he treats him/her accordingly. That’s respect.
- Before you move on, spend a moment applying this to the school’s student body.
- What would it look like in our school if everyone was valued?

Activity Phase: (10-12 minutes)

Activity: Lunchroom Shuffle (This activity will be done as a large class)

- Ask your class to imagine themselves walking into the cafeteria at lunch…the tables are crowded…there is a lot of talking going on…maybe a few people launching tater-tots across the room…(Keep building and describing the scene if you like).
- Now imagine that you are trying to figure out where you’re going to sit. But while you’re trying to find your place you notice that you are being treated differently than usual…the way you’re being treated is directly associated with a number that you’re holding up to your forehead (just have fun with this. Why you’re holding a number up to your forehead we’re not sure, but you are).
- As a matter of fact you notice that everyone is holding some number from 1-10 up to his forehead, and how they are being treated is directly related to the value of
the number. If it’s a 10, people are being treated well. But the lower the number, the less people are being regarded...(have fun with the set up. You can even insert your own setting: the mall, football game, or even the teachers’ lounge...that could be fun).

**More Guidelines:**
- Each student will receive a slip of paper with a number on it which will determine how he will be treated during the game. The higher the number, the better the treatment.
- Once one receives his number he is to go around and have random discussions with others in the room and speak to them according to the number on their foreheads.

*Mentors Note: Get involved and use this as an opportunity to set an example of participation. After 2-3 minutes ask the group to stop, collect the slips of paper and randomly redistribute for another round. When finished, break up into your individual teams for the next phase.*

**Discovery Phase: (8-10 minutes)**
This is your opportunity to ask your group what happened during the activity and what it could possibly mean.

**What Happened?** (Talk about your group’s experience)
- What was that like for you? How were you treated? How did you like it?
- How did you treat others? What went through your mind while you were interacting with others?
- How did you see others being treated? What was your personal response to that?

**What Does It Mean?** (Talk about what can be learned)
- How is this similar to our school? Are you ever in the same roles? How so?
- What goes through your mind when you see someone treated with disrespect? How about when you see teachers, rules or the school being disrespected?
- How does one go about increasing the standard of respect for others?

**Challenge Phase: (3-5 minutes)**
- Wrap up your group by going around the circle and asking each student to share an idea of how he/she will apply the principles of respect, “to consider worthy or high regard”, to someone in his/her life (allow students to pass). It could be a parent, sibling, coach, stranger, peer...challenge them to do this before you get back together next month.
APPENDIX 13

Psychological Sense of School Membership Scale
Psychological Sense of School Membership Scale

Please circle the response that best tells how you feel about the following statements.

<table>
<thead>
<tr>
<th>Statement</th>
<th>Not at all true</th>
<th>A little true</th>
<th>Moderately true</th>
<th>Mostly true</th>
<th>Completely true</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. I feel a real part of (school name).</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>2. People notice when I’m good at something.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>3. It is hard for people like me to be accepted here.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>4. Other students in this school take my opinions seriously.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>5. Most teachers at (school name) are interest in me.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>6. Sometime I feel as if I don’t belong here.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>7. There’s at least one teacher or other adult in this school I can talk to if I have a problem.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>8. People at this school are friendly to me.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>9. Teachers here are not interested in people like me.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>10. I am included in lots of activities at (school name).</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>11. I am treated with as much respect as other students.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>12. I feel very different from most other students here.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>13. I can really be myself at this school.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>14. The teachers here respect me.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>15. People here know I can do good work.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
</tbody>
</table>
16. I wish I were in a different school.  

<table>
<thead>
<tr>
<th></th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
</tr>
</thead>
</table>

17. I feel proud of belonging to (school name).  

<table>
<thead>
<tr>
<th></th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
</tr>
</thead>
</table>

18. Other students here like me the way I am.  

|   | 1 | 2 | 3 | 4 | 5 |
APPENDIX 14

The School Connection Scale
The School Connection Scale

*Please circle the response that best tells how you feel about the following statements.*

<table>
<thead>
<tr>
<th></th>
<th>Strongly Disagree</th>
<th>Disagree</th>
<th>Agree</th>
<th>Strongly Agree</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Adults in this school listen to students’ concerns.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>2. Adults at this school act on students’ concerns.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>3. I have many opportunities to make decision at my school</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>4. The principal asks students about their ideas.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>5. When there is an emergency there is someone there to help.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>6. We do not waste time in my classes.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>7. Students of all ethnic groups are respected.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>8. The rules at my school are fair.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>9. I can be a success at this school.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>10. I can reach my goals through this school.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>11. My schoolwork helps in things that I do outside school.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>12. It pays to follow the rules at my school.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>13. I am comfortable talking with adults at this school about my problems.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>14. I feel like I belong at this school.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>15. I have friends at this school.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>16. I can be myself at this school.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
</tbody>
</table>
APPENDIX 15

Advisory Program Survey
Advisory Program Survey

Please circle the response that best tells how you feel about the following statements.

<table>
<thead>
<tr>
<th>Number</th>
<th>Statement</th>
<th>Never</th>
<th>Rarely/Almost never</th>
<th>Some of the time</th>
<th>Most of the time</th>
<th>All of the time</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>I like going to advisory.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>2</td>
<td>Advisory is a waste of time.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>3</td>
<td>I get along with the students in my advisory.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>4</td>
<td>I have input on what we do during advisory.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>5</td>
<td>I participate in advisory discussions and activities.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>6</td>
<td>I am given the opportunity to share my opinion in class discussions.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>7</td>
<td>My advisory teacher conferences with my other teachers about my success in school.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>8</td>
<td>During advisory how much time is spent on activities such as taking attendance, collecting and distributing school notices, discussing school schedules, and other paperwork?</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>9</td>
<td>During advisory how much time is spent on activities such as reading, study skills, writing, homework, or tutoring?</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>10</td>
<td>During advisory how much time is spent on activities such as playing games, having free time, or talking with friends?</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>11</td>
<td>During advisory how much time is spent on activities such as team building, group discussion about school, school spirit, or community service projects?</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>12</td>
<td>During advisory how much time is spent on activities such as team building, group discussions about school, school spirit, or community service projects?</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>13</td>
<td>I have individual conferences or one on one conversations with my advisory teacher.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
</tbody>
</table>

Please circle the response that best tells how much you agree or disagree with the following statements.

<table>
<thead>
<tr>
<th>Number</th>
<th>Statement</th>
<th>Disagree a lot</th>
<th>Disagree</th>
<th>Disagree a little</th>
<th>Agree a little</th>
<th>Agree</th>
<th>Agree a lot</th>
</tr>
</thead>
<tbody>
<tr>
<td>14</td>
<td>I would feel comfortable talking to my advisory teacher if I had a school or academic problem.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
</tr>
<tr>
<td>15</td>
<td>I would feel comfortable talking to my advisory teacher if I had a problem with friends or family.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
</tr>
<tr>
<td>16</td>
<td>My advisory teacher cares about how I am doing.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
</tr>
<tr>
<td>17</td>
<td>My advisory teacher has made an effort to learn about me.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
</tr>
</tbody>
</table>
APPENDIX 16

Peer Leadership Satisfaction Survey
Peer Leadership Satisfaction Survey

9th grade Survey (Form A)

Name ________________________________________  Date __________

School Attended for 8th grade __________________________

This questionnaire is designed to help evaluate the Peer Leadership program that you have been participating in this year and to obtain information about your feelings towards school in general. Please choose the response that reflects the way you feel most of the time. There are no right or wrong answers and data will be used only in summary form for the whole class. Your individual responses will remain confidential. Please respond as honestly as possible.

For numbers 1-28, please rate each item on a 1-5 scale, where (1) is “Strongly Disagree” (2) is “Disagree” (3) is “No opinion/Neutral” (4) is “Agree” and (5) is “Strongly Agree”.

<table>
<thead>
<tr>
<th></th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Strongly Disagree</td>
<td>Disagree</td>
<td>No Opinion/Neutral</td>
<td>Agree</td>
<td>Strongly Agree</td>
</tr>
</tbody>
</table>

1. I am satisfied with the amount of contact I have with my peer leaders.
2. I am satisfied with the quality of the contacts I have with my peer leaders.
3. I enjoy the activities that I participate in with my peer leaders.
4. My peer leaders helped me adjust to the social life in high school.
5. My peer leaders helped me adjust to the academic demands of high school.
6. My peer leaders helped me adjust to the procedures of high school (e.g., finding classrooms and teachers).
7. I often turn to my peer leaders for assistance with a school-related problem.
Peer Leadership Satisfaction Survey

<table>
<thead>
<tr>
<th></th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Strongly Disagree</td>
<td>Disagree</td>
<td>No Opinion/Neutral</td>
<td>Agree</td>
<td>Strongly Agree</td>
</tr>
</tbody>
</table>

8. I often turn to my peer leaders for assistance with a personal problem.
   1 2 3 4 5

9. The peer leaders are people I can look up to.
   1 2 3 4 5

10. The peer leaders are role models for other students.
    1 2 3 4 5

11. I feel like a real part of Point Pleasant Beach High School.
    1 2 3 4 5

12. People here notice when I’m good at something.
    1 2 3 4 5

13. It is hard for people like me to be accepted here.
    1 2 3 4 5

14. Other students in this school take my opinions seriously.
    1 2 3 4 5

15. Most teachers at Point Pleasant Beach High School are interested in me.
    1 2 3 4 5

16. Sometimes I feel as if I don’t belong here.
    1 2 3 4 5

17. There’s at least one teacher or other adult in this school I can talk to if I have a problem.
    1 2 3 4 5

18. People at this school are friendly to me.
    1 2 3 4 5

19. Teachers here are not interested in people like me.
    1 2 3 4 5
### Peer Leadership Satisfaction Survey

<table>
<thead>
<tr>
<th></th>
<th>1 Strongly Disagree</th>
<th>2 Disagree</th>
<th>3 No Opinion/Neutral</th>
<th>4 Agree</th>
<th>5 Strongly Agree</th>
</tr>
</thead>
<tbody>
<tr>
<td>20. I am included in lots of activities at Point Pleasant Beach High School.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>21. I am treated with as much respect as other students.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>22. I feel very different from most other students here.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>23. I can really be myself at this school.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>24. The teachers here respect me.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>25. People here know I can do good work.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>26. I wish I were in a different school.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>27. I feel proud of belonging to Point Pleasant Beach High School.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>28. Other students here like me the way I am.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>29. Please list any extracurricular activities (e.g., sports, clubs, band) that you have participated in during 9th grade.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>