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MENTORING AS A METHOD FOR INCREASING THE GRADUATION
RATE OF "AT-RISK" STUDENTS

by
Thomas Anthony Lombardo

A Thesis

Submitted in partial fulfillment of the requirements of the
Master of Arts Degree
Of
The Graduate School
At Rowan University
April 3, 2001

Approved by _____

Date Approved May 11, 2001

Abstract

Thomas A. Lombardo

Mentoring as a Method for
Increasing the Graduation
Rate of "At-Risk" Students Will
2001
Dr. Kathleen Sernak
Educational Leadership

The purpose of this project was to improve high school graduation rates for "at-risk" students by providing every "at-risk 7th, 8th, and 9th grade student a mentor. By matching students who have been identified as "at-risk" of failing to graduate with an adult mentor from within Woodbury High School, this intern hypothesized that the students' grades would improve and that they would begin to feel as though they were an important part of the school community.

This study attempted to measure the overall effectiveness of the mentoring program by examining Math and Language Arts grades of the mentees prior to the mentoring and then again after inception of the mentoring. The assumption being made in this study is that improved grades will lead to improved graduation rates as these 7th, 8th, and 9th graders progress towards completion of their high school requirements.

The conclusion reached by this intern is that a school-based mentoring program has a modest positive effect on the academic achievement in language arts and math for at-risk students in the 7th, 8th, and 9th grades. Furthermore, if one assumes, as this intern did for the purposes of this study, that increased academic achievement will lead to

increased graduation rates, then it can be said that a school-based mentoring program may have a modest positive effect on graduation rates for those students participating.

Mini-Abstract

Thomas A. Lombardo

Mentoring as a Method for
Increasing the Graduation
Rate of "At-Risk" Students Will
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Over the course of several years, various Woodbury High School faculty members have expressed their dismay concerning the lack of academic achievement of many high school students, especially those fitting the traditional "at risk" definition. One method for increasing academic success is through weekly interaction in a one-to-one relationship with mentors. The conclusion reached by this intern is that a school-based mentoring program has a modest positive effect on the academic achievement in language arts and math for at-risk students in the 7th, 8th, and 9th grades. Furthermore, if one assumes, as this intern did for the purposes of this study, that increased academic achievement will lead to increased graduation rates, then it can be said that a school-based mentoring program may have a modest positive effect on graduation rates for those students participating.

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Chapter 1

Introduction

Focus of Study

This study will focus on the Woodbury High School 7th, 8th, and 9th grade "at-risk" students who have voluntarily agreed to participate in the mentoring program. The term "at-risk" refers to those students at risk of failing to graduate from high school. Based on a review of the current literature, a committee of teachers and administrators at the high school developed a list of factors that place a student "at risk" of failing to graduate from high school. These factors include academic course failures, grade retention, excessive latenesses or absences, and having a sibling previously drop out of school. Using these factors the Junior and Senior High Guidance Departments reviewed student records and identified students whose records indicated one or more of these factors. These students were then invited to participate in the mentoring program. Again, the program is voluntary. The students with "at-risk" factors were invited to participate in the mentoring program; no attempt was made to force unwilling students to participate.

The mentors involved in the program are volunteers. They will not be paid and much if not all of the time spent mentoring will be outside the normal work hours. The entire Woodbury High School staff and faculty were invited to participate as volunteer mentors. There are cafeteria workers, secretarial staff, maintenance people, teachers, and administrators who have volunteered to serve as mentors. Before mentors were matched

with their mentee, they received approximately four hours of training. The training covered topics such as: mentor expectations; time requirements; mentor tasks and responsibilities; and a general question and answer session. The purpose of the training was to provide the mentors with some useful/practical information prior to beginning the mentoring process.

This study will focus on the impact of mentoring on the graduation rate of those students identified as "at-risk" of graduating. For the purposes of this study, the assumption will be made that better grades lead to higher graduation rates. This is necessary because of the short duration provided for this study does not permit a longitudinal study of the students as they progress from 7th, 8th, and 9th grades through high school. Instead this intern will examine the Language Arts and Math grades of the mentees from the immediately prior school year (marking periods 2 and 3) with the English and Math grades they receive in marking periods 2 and 3 of the current year--after participating in the mentoring program.

Purpose of the Study

The purpose of this study is to develop a mentoring program for "at-risk" 7th, 8th, and 9th grade Woodbury students and improve the graduation rates of these "at-risk" students. By matching students who have been identified as "at-risk" of failing to graduate with an adult mentor from within Woodbury High School, this intern anticipates that the students' grades will improve and that they will begin to feel as though they are an important part of the school community. Through continued involvement, the mentor will provide support, guidance, and assistance as the mentee goes through difficult periods, faces new challenges, or works to correct earlier problems. The emphasis is on

experiences between the mentee and the mentor and the development of the relationship over time. The mentor will serve as teacher, advisor, and sponsor who encourages, praises, and prods, bolstering the mentee's sense of competence and self-concept.

This study will attempt to measure the overall effectiveness of the mentoring program by examining Math and Language Arts grades of the mentees prior to the mentoring and then again after inception of the mentoring. The assumption being made in this study is that improved grades will lead to improved graduation rates as these 7th, 8th, and 9th graders progress towards completion of their high school requirements.

Through the development and implementation of the mentoring program the intern expects to further refine his leadership skills through constant interaction with various school personnel, from administrators and teachers to maintenance and secretarial staff. This project will compel the intern to initiate and manage change as both leader and member of a leadership team. Throughout the project there will be opportunities for analyzing and solving problems using appropriate decision-making techniques. At times the intern will be called upon to produce clear, concise, properly structured written communications styled to fit the audience. At other times it will be necessary to communicate orally with students, staff, and the community in ways that motivate them to reflect upon and support the school's mission. Finally the intern looks forward to the opportunity to listen actively and respond appropriately to the ideas and opinions of others.

The intended organizational change is a school that better serves all of its students, especially those that may be living under tremendous pressure because of poverty, divorce, teen pregnancy, drug abuse, violence, stress, etc. Specifically, the "at-

risk" students should enjoy greater academic success and an increased sense of belonging that will translate into fewer dropouts and higher graduation rates for the "at-risk" population and the school as a whole.

Definitions

Academic success - Any increase in math and/or language arts grades between the 1999-2000 2nd or 3rd marking period and the 2000-2001 2nd and 3rd marking period is academic success for the purposes of this study.

At-risk - The term "at-risk" refers to those students at risk of failing to graduate from high school. Based on a review of the current literature, a committee of teachers and administrators at the high school developed a list of factors that place a student "at risk" of failing to graduate from high school. These factors include academic course failures, retention, excessive latenesses or absences, and having a sibling previously drop out of school.

District Factor Group (DFG) - The District Factor Group is a measure of income, education attainment and other demographic factors of district residents. It ranges from A in the poorest districts to I and J in the wealthiest. Woodbury is designated a DFG B school.

Mentor - Mentors are volunteers from within the Woodbury High School. They include teachers, administrators, secretaries, custodians, cafeteria workers, and instructional assistants (commonly called aides). Mentors are volunteers and will not receive financial remuneration of any kind for agreeing to mentor. .

Mentee - Mentees are students identified as "at-risk" of failing to graduate due to factors such as academic course failures, retention, excessive latenesses or absences, and

having a sibling who has previously dropped out of school. They have been invited to participate and voluntarily have chosen to accept the invitation to participate.

School Community - This consists of every person who works for the Woodbury School District at the Junior and Senior High School. This includes, but is not limited to, teachers, administrators, secretaries, custodians, cafeteria workers, and instructional assistants (commonly called aides).

Student mobility rate - This is the percentage of students entering or leaving during a given school year

Total Cost Per Pupil - this includes tuition expenditures, transportation, lease purchase interest, residential costs, judgments against the district, facilities/acquisition costs, restricted expenses, less nonpublic services and adult schools, plus students sent out of the district.

Limitation of the Study

The first major limitation of this study is that the intern will examine 2nd and 3rd marking period grades for math and language arts from before the mentee's participation in the mentoring program and compare them with 2nd and 3rd marking period grades in the same subjects after participation by the mentee in the mentoring program. The assumption that the intern will make is that increased academic success will translate to increased graduation rates in the future. The reason for this is that the study will last only one school year. The intern does not have four to five years to track these 7th, 8th, and 9th graders to determine how many of mentoring program participants eventually graduate. Instead, the intern will make the assumption that graduation rates will increase as academic success increases.

Another limitation is that only 2nd and 3rd marking period grades will be compared. This is because mentees will not have been in the mentoring program long enough for 1st marking period grades to provide any meaningful measure of the effectiveness of the mentoring. And the Rowan course requirements that the intern is subject to do not permit examination of 4th marking periods grades: the principal's internship course through Rowan University and in turn the study, will have concluded by the time grades are calculated and reported for the 4th marking period.

It is anticipated at this time that there will be forty to fifty mentees participating in the mentoring program. In order to keep the data to a manageable amount, the intern will examine Math and Language Arts grades only. The other subject areas will not be examined. The study will assume that any positive result from the mentoring program may affect the other subjects to a similar degree and in a similar fashion as it did to the math and language arts grades. It is simply not feasible or practical for the intern to examine all subject areas to determine whether there has been any increase in grades as a result of the mentoring.

Another substantial limitation of the study is that mentees will only have several months of mentoring before the 2nd marking period closes. The literature indicates that mentoring may have a favorable result if the effort is sustained over a relatively long period of time. Several months are most probably not within the definition of "a relatively long period of time." However, once again, the course requirements restrict the intern to examining only the 2nd and 3rd marking period. A longer period of mentoring before examining grades is not available.

It is important to remember that the students will have different teachers this year than they had last year. This study will not account for the differences between the teachers last year and the teachers this year. It is plausible that any change in Math and Language Arts grades could be due to the change in teachers, rather than participation in the mentoring program. The nature of the study makes it impossible to eliminate this possible confounding variable.

Setting of the Study

Community

The City of Woodbury, one of the oldest "small cities" in the United States, had its beginning in 1683 when Henry Wood, a Quaker from Bury, England, settled here. By 1715 Woodbury had become a Quaker religious center and was a thriving hamlet at the onset of the American Revolution. By the mid-nineteenth century Woodbury had grown considerably and was incorporated as a city in 1871. The City of Woodbury enjoyed its greatest economic and population growth between 1880 and 1900. This was accomplished in large part as a result of the Green family and their patent medicine industry. Woodbury has been the County Seat of Gloucester County for over two centuries. The County continues to this day to develop its operational base throughout the City of Woodbury. This fact, along with the growth of Underwood Memorial Hospital, has made Woodbury the legal and medical hub of the immediate vicinity. Located on Highway 45, one mile south of Interstate 295 and approximately eight miles southeast of Philadelphia, Woodbury is surrounded by the communities of National Park, West Deptford, Woodbury Heights, Wenonah, Mantua, East Greenwich, Deptford, and

Westville who combined population of approximately 80,000 residents are within a 10 minute drive of Woodbury's downtown.

According to the 1990 census report, Woodbury is a city of just under 11,000 people. Almost half are men and a little more than half are women. Seventy-eight percent of the residents are white, twenty percent are black and the remaining two percent are of Hispanic, Asian, or of American Indian descent. The median age for a Woodbury resident was 33.7 years at the time of the 1990 census taking. Twenty-eight percent of the people aged 18 or over were high school graduates and eighteen percent had at least a college degree.

In 1989, per capita income was \$13, 842. The median household income was \$28, 993 and the median family income was \$37, 616. Twelve percent of the city population was considered to live in poverty. In 1989, out of a civilian labor force of 5,043, there were 1,265 managers and professionals; 1,546 technicians, sales, and administrative support workers; 610 service workers; 60 employed in either farming, fishing, or forestry; 495 working in precision production, craft or repair; 653 operators, fabricators, and laborers; and finally, 233 people who classified themselves as self-employed.

School System

The Woodbury Public Schools District Mission Statement reads:

Building upon history, diversity and convictions, the Mission of the Woodbury Public Schools is to educate all of our students to be responsible citizens who excel in their endeavors and meet life's challenges with courage and confidence; this is accomplished by providing strong academic and co-curricular opportunities, delivered by skilled and educated individuals, in partnership with a small supportive community.

Woodbury's first high school, located at its present site, was named the William Milligan High School after the District's and County's first Superintendent who had given nearly forty years of his life to the education of Woodbury's youth. The school, authorized in 1908, was completed in late 1909. Shortly after 5:00 a.m. on December 19, 1910, a fire enveloped the newly constructed school burning the \$73,000 structure to the ground. Only the outer walls were left standing. Rebuilt in 1911 with the then Governor and future President, Woodrow Wilson, laying the cornerstone, it was renamed the Woodbury High School and served Grades 9-12. During the interim, students attended classes in the Merritt Building at the northeast corner of Cooper and Broad Streets and in Green's Block at the southeast corner of Broad and Centre Streets. It was in 1915, when the Carpenter Street School was being built to house the expanding black student population that another serious fire broke out in the high school. Fortunately the fire companies were able to extinguish the blaze without any serious or extensive damage taking place. The Carpenter Street School housed grades K-8 and was built in two stages, the first in 1915 and the second a few years later. This school was closed in the early sixties when the District integrated its K-8 schools.

An auditorium and the now defunct Central School were added to the high school in 1916. The West End Memorial School, bounded by Queen, Jackson and Logan Streets, was dedicated in 1950 as a replacement for the deteriorating West End School. The Evergreen School, located on Evergreen Avenue, was dedicated four years later. A new high school gymnasium, Junior High School Annex (currently used to house the District's sixth graders) and additions to all elementary schools - Evergreen, Walnut and West End Memorial - were completed in 1957. This construction was closely followed by

the addition of a new kitchen and high school cafeteria in 1960. Further in 1968, a new wing was added to the high school containing a home economics suite, science rooms and the current Junior-Senior High School's library, with additions to West End and Evergreen Avenue Elementary Schools.

Since 1863, there have been twenty-two superintendents of school including the present superintendent. The last six of whom were Dr. Warren J. McClain, Dr. Donald E. Beineman, Ervin A. Arbo, Claudio E. Arrington, R. Craig Barry and the current superintendent, Judith A. Wilson. It was during Dr. McClain's superintendency that the sending District of Deptford built its own high school and its students left in 1957 and the sending Districts of Wenonah, National Park, Woodbury Heights and Westville bonded together to build Gateway Regional High School in 1965.

Woodbury School District has been designated a "District Factor Group B" school by the New Jersey Department of Education. The District Factor Group is a measure of income, education attainment and other demographic factors of district residents. It ranges from A in the poorest districts to I and J in the wealthiest. The latest figures (1998-99) indicate that there were 722 students enrolled at the Junior/Senior High School--grades 7 through 12. Of the 722, nine percent were classified as eligible for special education, thirteen percent were in 12th grade, thirteen percent were in 11th grade, thirteen percent were in 10th grade, twenty-one percent were in 9th grade, fourteen percent were in 8th grade, and seventeen percent were in 7th grade. Ninety-nine percent of the students enrolled at Woodbury spoke English at home primarily. The other one percent spoke Cantonese.

For the 1999-2000 school year, the total cost per Woodbury pupil was \$9414. The total comparative cost per pupil is \$8418. The state average total cost per pupil was \$9872 and state average total comparative cost per pupil was 8487. Total Cost Per Pupil includes tuition expenditures, transportation, lease purchase interest, residential costs, judgments against the district, facilities/acquisition costs, restricted expenses, less nonpublic services and adult schools, plus students sent out of the district. These items are not included in the Total Comparative Cost Per Pupil. The Woodbury total administrative cost per pupil was 913 for the 1999-2000 school year compared with the statewide average of 933.

During the 1998-1999 school year, 67 students (72% of those eligible to take the test) took the SAT. The state average was 78%. Woodbury students scored an average of 521 on the math and 521 on the verbal portions. The state average for the math and verbal sections was 513 and 521, respectively. Within the district factor group (DFG), in both the math and verbal sections, Woodbury ranked #1. Statewide Woodbury students ranked 120 in math and 82 in the verbal portions of the SAT.

On the 11th grade High School Proficiency Test (HSPT) administered in October, 1998, 74.7% of the Woodbury students taking the test passed all sections. 82.8% passed the reading portion, 88.5% passed the math portion and 90.8% passed the writing portion. Out of 332 schools statewide, Woodbury students ranked 232, 231, and 171 respectively for the three portions mentioned in the immediately preceding sentence. Within their DFG Woodbury's students ranked 15th, 12th and 6th respectively.

The New Jersey Grade Eight Proficiency Test was administered in March of 1999. Ninety-two Woodbury students took the test. In mathematics, 48.4% were

partially proficient, 41.9% were proficient, and 9.7% were advanced proficient. In Language Arts, 13% of the students were partially proficient, 83.7% were proficient, and 3.3% were advanced proficient. Twenty-four special education students tested as well. In Language Arts, 79.2% scored partially proficient, 20.8% scored proficient, and 0% scored advanced proficient. In Mathematics, 84.6% scored partially proficient, 15.4% scored proficient, and 0% scored advanced proficient.

The student mobility rate--the percentage of students entering or leaving during the school year was 36.8% in 1998-1999. Contrast this to the state average of 13.7% and one immediately realizes the large disparity. Part of disparity can be explained by the fact that Woodbury is the county seat for Gloucester County and the center of the counties transportation system. It has been pointed out to this intern that many people on the lower end of the socio-economic ladder move to Woodbury to take advantage of the extensive network of bus routes that serve the city and the social service agencies that are often located in and around Woodbury. Individuals from the lower socio-economic strata use a disproportionate share of the social services and utilize the public transportation system to a greater extent than those with greater financial resources.

At the top of the administrative hierarchy of the Woodbury School District is Judith A. Wilson, superintendent. The school business administrator is Lynn Shugars. There are three elementary schools (full day kindergarten through grade five) each headed by a principal. At the junior/senior high, there is one principal, John Gamble and two vice-principals. Robert Moyer is vice-principal for the high school (grades nine through twelve) and Robert London is the vice-principal for the junior high school (grades seven and eight) and the sixth grade. Also at the high school is the curriculum

coordinator, Jane Plenge and John Mazzei, the director of academic and community programs. The high school has two guidance counselors, Lee Phannenstein and Barbara Castleberry and the junior high school one, Marge Pertuit. Grant Shivers is responsible for athletics, transportation, and extra-curricular activities (clubs). In 1998-1999, the district median salary for an administrator was \$74,250 with 22 years of service on average. This compares to the state median salary of \$86,805 and 26 years. The student to administrator ratio at Woodbury was 144:1 in 1998-1999. The state average was 187:1.

There are approximately seventy-eight teachers in grades 7 through 12. The ratio of student to teacher is 9.3:1. This compares to the statewide average of 11.6 to 1. The median salary for a teacher at Woodbury is \$42,850 with fourteen years of experience on average. The state median is \$47,924 with sixteen years experience on average. In 1998-1999, 64% of the administrators and teachers had either a BA or BS degree, 35% had either a MA or MS and 1% had either a Ph.D. or EdD.

Significance

In the United States, parents are the central source of emotional, financial, and social support for their children. Many youth are also fortunate to be part of larger networks including grandparents, other relatives, neighbors, and community and religious organizations. Adults in these networks can offer youth extra attention, affection, guidance, and sense of direction--all of which are increasingly important given the wide array of outside influences, not all of them positive, that face our youth today. Fehr, Dennis, E. (1993). When Faculty and Staff Mentor Students in Inner-city Schools.

Middle School Journal, Sept., 188-189.

However, family, community, and civic life in this country are changing. Fewer people know their neighbors. More households than ever before are headed by a single parent. And the time pressures facing working families can limit their community involvement. This means that these networks of non-parental resources may now be harder for children and parents to access. In addition, many youth live in families that are under tremendous pressure because of poverty, divorce, teen pregnancy, drug abuse, violence, or stress. These troubled families are often isolated from the larger community and, as a result, the youth in the greatest need of help from outside the family may be the least likely to get it. Freedman, M. (1993). Fervor with Infrastructure: Making the Most of the Mentoring Movement, Equity and Choice, 9(2), 255.

Nationally, one out of four students will drop out of high school. Of those who graduate, many leave deficient in basic reading, writing, and math skills. This situation translates into a lifetime of low-paying, low-status, dead-end jobs for these children. They desperately need the help of caring and kind adults to change their direction from failure to success. One on One: A Guide for Establishing Mentor Programs, U.S. Department of Education, Wash. D.C. The self-perceived needs of at risk students include; having teachers who are supportive and encouraging and who will talk personally with students; getting good grades; feeling as though they are part of the school and; getting more information through personal contact, on the options available to them. Slicker, E., & Palmer, D. (1993). Mentoring At-Risk High School Students: Evaluation of a School-Based Program, The School Counselor, 40, 328. Many of these perceived needs may be addressed in a carefully designed and thoughtfully implemented mentoring program.

Over the course of several years, various Woodbury High School faculty members have expressed to this intern their dismay concerning the lack of academic achievement of many Woodbury High School students, especially those fitting the traditional "at risk" definition. Most faculty members agree that the dropout rate of high students needs to be reduced through the combined efforts of home, school, and community. This intern believes it is critical to identify potential dropouts early and provide a support system that helps them develop positive attitudes about themselves, resulting in improved academic achievement leading to a lower dropout rate. One method for reducing dropout rates is through weekly interaction in a one-to-one relationship with volunteer adult mentors who serve as a friend, coach, positive role model, and advocate for their mentees. Mentors would be school personnel who volunteer to participate in the program. They can be teachers, administrators, secretaries, cafeteria workers, and custodians. They must value education, care about the student, and want the student to succeed academically.

The studies that have been done on mentoring indicate that a well designed and implemented mentoring program has the capability to improve student success to some degree and in some areas. It should be thought of as a useful, albeit, modest approach for addressing "at-risk" students' needs. Admittedly, it cannot be a panacea for all of the problems besetting mentees, but a well designed and implemented mentoring programs appears to hold the promise of reducing, to some degree, the dropout rate of Woodbury's "at risk" students.

Organization of the Study

Chapter Two--Review of Literature-- will introduce the reader to the current research on mentoring. It will provide information on the benefits and limitations of mentoring programs. It will describe the most common attributes of a well designed and thoughtfully implemented plan. Finally, Chapter Two will offer different models of mentoring programs utilized by various organizations and agencies throughout the United States.

Chapter Three-- Design of the Study--will delineate the various components of the study, including, but not limited to: the methods to be used in gathering the academic information from which to establish the baseline performance in math and language arts; the methods of analysis to be used; a specific description of the mentoring program, including all its components; and rationales for choosing one method or strategy over another.

The research findings will be presented in a straightforward narrative form. A comparison of the 1999-2000 school year 2nd and 3rd marking period grades in math and language arts with those from the 2nd and 3rd marking period during the 2000-2001 will readily indicate whether there was an improvement and if so, how much. Accompanying the narrative recitation of the findings will be a one page chart with the 2nd and 3rd marking period grades in both math and language arts from the two school years examined (1999-2000 and 2000-2001).

Chapter Five--Conclusions, Implications and Further Study--will summarize the findings, attempt to draw reasonable conclusions and extrapolations, and discuss the implications of the research. The intern will attempt to determine if the findings of the

study on Woodbury's mentoring program provide any new information or insight relating to the field of mentoring in general. Finally, the intern will examine the collected data and the conclusions drawn for the purposes of suggesting areas where further study may be possible or needed.

Chapter 2

Review of the Literature

In the United States, parents are the central source of emotional, financial, and social support for their children. Many youth are also fortunate to be part of larger networks including grandparents, other relatives, neighbors, and community and religious organizations. Adults in these networks can offer youth extra attention, affection, guidance, and sense of direction--all of which are increasingly important given the wide array of outside influences, not all of them positive, that face our youth today. Fehr, (1993) However, family, community, and civic life in this country are changing. Fewer people know their neighbors. More households than ever before are headed by a single parent. And the time pressures facing working families can limit their community involvement. This means that these networks of non-parental resources may now be harder for children and parents to access. In addition, many youth live in families that are under tremendous pressure because of poverty, divorce, teen pregnancy, drug abuse, violence, or stress. These troubled families are often isolated from the larger community and, as a result, the youth in the greatest need of help from outside the family may be the least likely to get it. Freedman (1993)

The decrease in adult involvement in children's lives has been linked to numerous consequences for youth, from low achievement or grades, to lowered career aspirations, to truancy and juvenile crime. Brewster & Fager (1998) Nationally, one out of four students will drop out of high school. Of those who graduate, many leave deficient in basic reading, writing, and math skills. This situation translates into a lifetime of low-

paying, low-status, dead-end jobs for these children. They desperately need the help of caring and kind adults to change their direction from failure to success. ("One on One," 1993)

One strategy to combat the changing complexion of the American family that has become popular over the past decade is mentoring--pairing students with adult volunteers or older students who provide friendship, guidance, and support as students navigate new and ever more challenging circumstances. Mentors have been called the "beacon of hope" for young people. They can be a powerful way to provide adult contact for youth who may otherwise receive little guidance in their schools, homes, communities, and workplaces. Dondero (1997) Dropouts often cite the absence of caring adults as one of the primary reasons for leaving school. Smerk (1990)

Just what is mentoring? Mentoring--from the Greek word meaning enduring--is defined as a sustained relationship between a youth and an adult. Hamilton and Darling identified three major dimensions of the mentoring role and relationship: the mentor as a role model who teaches by example, as a teacher who points out areas where proteges can improve performance by sharing their own experiences, and as a challenger who both pushes and supports proteges to set high goals. Rutherford et al. (1999) Through continued involvement, the adult offers support, guidance, and assistance as the younger person goes through difficult periods, faces new challenges, or works to correct earlier problems. In particular, where parents are either unavailable or unable to provide responsible guidance for their children, mentors can play a critical role. Dennis (1993) The establishment of mentoring programs in public schools is, in part, also a reflection of the changing complexion of the American family, and the societal trend for schools to

assume responsibility for more of the functions historically satisfied within the family unit. While it can be debated whether this trend is a healthy or appropriate one, nevertheless, it seems to be a direction in which schools are headed. Carmola (1995) In a school-based mentoring program, the emphasis is on experiences between two people and the development of the relationship over time. In the one-to-one relationship, the youth is given undivided attention. The focus is on the child and his/her thoughts, feelings, and dreams. This develops the child's sense of importance, self-esteem, and competence. Becker (1994) Slicker and Palmer stated it this way; "the mentor serves as teacher, advisor, and sponsor who encourages, praises, and prods, bolstering the mentee's sense of competence and self-concept." Slicker & Palmer (1993)

The popularity of mentoring has been established for several decades. In 1988, Columbia professor Erwin Flaxman published a paper about the rise of mentoring. This paper sparked great interest in research about the value of mentoring as an intervention for isolated youth. In 1988, the Education Commission of the States mentioned mentoring as a way to reverse the high dropout rate among high school students. Holm & Dynak (1994) And in 1989, a national survey of youth agencies conducted by President Bush's Points of Light Foundation identified mentor strategies as the best way to help at-risk youth. Hamilton & Hamilton (1992)

There are two types of mentoring; natural and planned. Natural mentoring occurs through friendship, collegiality, teaching, coaching, and counseling. In contrast, planned mentoring occurs through structured programs in which mentors and participants are selected and matched through formal processes. Dennis (1993) This paper discusses

planned mentoring exclusively and henceforth the word mentoring refers to planned mentoring.

The positive effect on gifted students from mentoring has been well established in the literature. Slicker & Palmer (1993) If a mentor can promote educational attainment in a gifted student, could a mentor have a similar effect on a student at risk of dropping out? There appears to be a dearth of research on the effects of mentoring at-risk students. Some studies and program evaluations however, do support positive claims. Flaxman (1991) In evaluation of Project RAISE, a Baltimore-based mentoring project, McPartland and Nettles (1991) found mentoring had some limited positive effects.

RAISE started in May 1998 with seven community sponsors/mentors who each made a seven year commitment to provide support to groups of approximately sixty at-risk students, beginning from the time they enter grade six and following them through subsequent middle and high school grades. According to project materials, the basic RAISE strategy is to create on a large scale the kind of sustained caring connections which can make a dramatic difference in the lives of very high risk children. RAISE administrators hoped to improve students' self-esteem and school-related behavior and academic progress, and to reduce high-risk behaviors such as substance abuse and teenage pregnancies. The mentors' job included monitoring attendance, grades and behavior, building a relationship of trust with each student, and trouble shooting for individual students when necessary. Some mentors assisted with after-school activities such as tutoring and recreation and with periodic events such as museum or zoo visits, attending athletic events, roller skating, or going to the movies. However, not all the mentors established the one to one mentoring component of the RAISE model.

McPartland and Nettles concluded that there had been a positive effect on school attendance and grades in English but not on promotion rates or standardized test scores. The effects though sizable were not sufficient to neutralize the academic risks with which students entered the program. Even after the RAISE benefits, the average student continued to have serious problems of absenteeism and low grades compared to the typical student in the district. Nevertheless, McPartland and Nettles point out that the student behaviors where RAISE was successful in its first two years can be viewed as steps in a sequence to improve students' academic changes as the program continues. Finally, and most importantly, the researchers concluded that positive effects were much more likely when one-on-one mentoring was strongly implemented. McPartland & Nettles (1991)

In 1993, researchers, Blum and Jones reported on a mentoring program that took place in Reston, Virginia. The program was titled "Rendering Educational Assistance through Caring Hands" (REACH). Classroom teachers first identified students based on poor attendance, repetition of a grade level, poor grades, potential failure, or poor relationships with peers and teachers. After guidance counselors conducted interviews with these students, fifty-two remained eligible. Out of these fifty-two students, twenty-two were randomly selected to participate in the mentoring program. Guidance personnel described the plan and purpose of the mentoring program at a faculty meeting, and teachers volunteered to be mentors. Those who volunteered attended an in-service workshop, at which the time commitment was specified. The faculty members were encouraged to be mentors of children with who they already had daily contact. Mentors were given monthly calendars on which they indicated all meetings they held with their

students, and the parents and teachers of those students. Program activities included workshops for mentors and students, meetings of parents and mentors, field trips for students and mentors, and home visits by the mentors. The teachers who taught the students were interviewed during the third quarter of 1988-1989. They indicated that the students in the REACH program improved in the following areas:

- Promptness to class
- Preparation for class
- Quantity of daily assignments completed
- Quality of daily assignments completed
- Participation in class
- Classroom behavior
- Positive interactions with peers
- Report card grades

And finally, it was noted that more significant improvements were made by students whose mentors interacted with them daily; tutored students or supervised after-school study sessions; monitored academic progress; and elicited parent involvement. Blum & Jones (1993)

Another study, this one by Cave and Quint in 1990, found participants in various mentoring programs had higher levels of college enrollment and higher educational aspirations than non-participants receiving comparable amounts of education and job-related services. Cave & Quint (1990)

And there have been other researchers who have observed a positive correlation between a well designed and implemented mentoring program and student behavior in

school. In 1994, an evaluation was conducted of the Toronto Board's "Change Your Future" program which had a mentoring component. This evaluation indicated that participating students had a lower dropout rates and transfer rates, and somewhat higher credit accumulation, than comparable students not in the program. Brown (1996) In another study, this one completed in 1993, Freedman and Jaffe concluded that pairing older adults with children resulted in significant relationships that provided benefits to both partners. Freedman & Jaffe (1993) Finally, a 1995 evaluation of the Big Brothers/Big Sister mentoring program conducted by Public/Private Ventures provided evidence that mentoring programs affect young people in positive ways. The study found among other things, that participants had improved their school attendance and performance, experienced positive attitudes toward completing school work, and improved their peer and family relationships. And the impact was even greater among minority participants. Tierney & Grossman (1995)

One should keep in mind that not all studies reveal positive results. An evaluation of Milwaukee's One-On-One program that was designed to raise students' grades, showed no gains in achievement. Similarly, a Lexington, Kentucky mentor program for low-income African-American teens with a history of school failure showed no significant improvements in the students' self-esteem, grades, attendance, or discipline. Black (1999)

Another question worth discussing is not whether mentoring is effective, but the degree of its effectiveness. Researchers and practitioners have cautioned against inflating the extent to which mentoring will make a difference. Although McPartland and Nettles found that the mentoring program they studied had the potential for improving

attendance, they nevertheless concluded that the effects of such a program were not yet powerful enough to increase average attendance to "desirable rates." McPartland & Nettles (1991) Researcher, Michael Laugherey in 1990, found that academic performance was improved as a result of a mentoring program in Chicago, but not as much as original programs goals intended--perhaps because the expectation for improvement was unrealistic. Brown (1996)

In summary, these results indicate that mentoring has the capability to improve student success, but should be thought of as a useful but modest approach for addressing students' needs. Twice a week contact with a child is not, admittedly, a panacea for the problems besetting mentees, but a well designed and implemented mentoring program appears to hold the promise of reducing, to some degree, the dropout rate of "at risk" students.

Chapter 3

The Design of the Study

The purpose of this research study was to measure the overall effectiveness of the Woodbury High School mentoring program by examining Math and Language Arts grades of the mentees prior to the mentoring and then again after participating in the mentoring program for two full marking periods. The assumption made was that improved grades would lead to improved graduation rates as the 7th, 8th, and 9th graders progressed towards completion of their high school requirements.

Participants

Based on a review of the current literature, a committee of teachers and administrators at the junior/senior high school developed a list of factors that place a student "at risk" of failing to graduate from high school. The students participating--mentees--were those students identified as "at risk of failing to graduate from high school." These factors include academic course failures, retention, excessive latenesses or absences, disciplinary problems, and having a sibling previously drop out of school. Other personal/family issues were also considered when selecting mentees for participation. Along with this intern, the school social worker, junior high school guidance counselor, and several veteran teachers selected students who fit the above listed criteria. Because only sixty-one mentors volunteered, the selection committee had to limit the mentees to sixty-one, in effect excluding twenty to thirty of the children who

had been originally identified. Twenty-one of the mentees were male and forty were female. In most cases male students were matched with a male mentor and female students were matched with a female mentor.

Mentors were self-selected. Every individual who worked at Woodbury Junior/Senior High School, regardless of position, was invited to volunteer as a mentor. Mentors included teachers, administrators, secretaries, custodians, cafeteria workers, and instructional assistants (commonly called aides). Mentors were volunteers and did not receive financial remuneration of any kind for agreeing to mentor. . A brief description of the mentor expectations was provided and those interested were asked to send back the bottom of their invitation indicating their intention to participate as a mentor. At the inception of the mentoring program there were sixty-one mentors. The mentoring program lost several mentors during the course of the program but they were replaced by new mentors to keep the necessary number of mentors to serve the existing pool of mentees.

The level and quality of mentoring these children received varied depending on the particular mentor with whom they have been matched. Although mentors were provided an orientation and training was on going, invariably some mentors were more involved and committed than others. The administrative lines of the mentoring program were designed deliberately in an attempt to minimize the potential for inconsistent mentoring practices or even failure to adequately mentor.

There were three people responsible for the overall implementation of the mentoring program. The intern himself, a teacher (who is also a mentor), and the junior high school guidance counselor (also a mentor). These three individuals met on a weekly

basis to discuss issues related to the mentoring program such as mentor concerns raised, mentor-mentor problems and successes, developing further training, ways to follow-up and support the mentors, activities for the mentors and mentees etc. This intern often initiated ideas but before their implementation, the three lead mentors always discussed it and often refined or modified the idea.

Data Collection

The sixty-one mentors were divided into three groups. Each of the three lead mentors were assigned approximately twenty mentors. The purpose of this was to provide each of the mentors with a familiar person to look to for guidance when necessary and most importantly to permit communication to pass from lead mentor to mentor and vice versa as efficiently as possible. Supporting the three lead mentors were the facilitators. Each of the twenty (one of the three groups has twenty-one mentors) mentors from the three groups were assigned into a group of five or six headed by a facilitator who was also a mentor. This person was chosen by the intern, after considerable consultation and discussion with the other two lead mentors, for her ability to lead others in discussion once a month and report back to their lead mentor who in return brings this information to weekly lead mentor meetings. The facilitators were faculty members who were well respected and trusted by their colleagues.

Each of the three lead mentors met with their three facilitators on a weekly basis face to face and via e-mail as often as necessary. When information needed to be shared to the entire mentor group, the three lead mentors distributed that information to their three facilitators who in turn distributed it to the members of their learning community. The process also worked in the opposite direction. If a mentor had information useful to

either the facilitator or the lead mentor, they would send it in the same fashion, only in the opposite direction (from mentor to facilitator to lead mentor). Of course, any mentor could go directly to any facilitator or lead mentor at any time. The hierarchy was established to create definitive lines of communication so people knew where to go when they have questions, suggestions, or ideas to pass along to others.

Data Collection and Analysis

On September 14, 2000 this intern obtained the academic records for the mentees in the mentoring program from the Junior High School Guidance Office. From these records, the intern examined and recorded the 1999-2000 school year's 4th marking period language arts and math grades for each of the mentees participating in the mentoring program. On or about March 16th, at the end of the 2000-2001 school year's 3rd marking period, the 2nd and 3rd marking periods language arts and math grades for each of the mentees will be obtained and recorded.

This intern compared the 1999-2000 school year's 4th marking period language arts and math grades for each of the mentees participating in the mentoring program with the 2000-2001 school year's 2nd and 3rd marking grades. It is important to keep in mind the significant assumption that was necessitated by the short duration of time available to the intern for data gathering. . The assumption being that increased academic success, as demonstrated by an increase in the grades between the 4th marking period of the 1999-2000 school year and the 2nd and 3rd marking periods of the 2000-2001 school year (before and after mentoring took place), will translate to increased graduation rates in the future. Again this assumption was necessitated by the fact that this intern was unable to track the mentee through to graduation to examine the "true" graduation rates.

A comparison of the two sets of grades for each subject (language arts and math) for each student yielded data that was analyzed in several ways. Below are the math and science grades for each student for the 4th marking period (1999-2000 school year) and for the 2nd and 3rd marking periods (2000-2001 school year).

KC (#1)	4 TH MARK. PD. 1999-2000 sch. yr.	2 ND AND 3 RD MARK. PD. 2000-2001 school year
MATH	85	84, 81
LANGUAGE ARTS	82	86, 81

TB (#2)	4 TH MARK. PD. 1999-2000 sch. yr.	2 ND AND 3 RD MARK. PD. 2000-2001 school year
MATH	71	75, 66
LANGUAGE ARTS	62	66, 67

JC (#3)	4 TH MARK. PD. 1999-2000 sch. yr.	2 ND AND 3 RD MARK. PD. 2000-2001 school year
MATH	79	75, 65
LANGUAGE ARTS	72	70, 78

KH (#4)	4 TH MARK. PD. 1999-2000 sch. yr.	2 ND AND 3 RD MARK. PD. 2000-2001 school year
MATH	85	83, 77
LANGUAGE ARTS	77	86, 80

BL (#5)	4 TH MARK. PD. 1999-2000 sch. yr.	2 ND AND 3 RD MARK. PD. 2000-2001 school year
MATH	84	84, 86

LANGUAGE ARTS	78	81, 85
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TB (#6)	4 TH MARK. PD. 1999-2000 sch. yr.	2 ND AND 3 RD MARK. PD. 2000-2001 school year
MATH	70	66, 74
LANGUAGE ARTS	50	67, 64

AN (#7)	4 TH MARK. PD. 1999-2000 sch. yr.	2 ND AND 3 RD MARK. PD. 2000-2001 school year
MATH	84	75, 80
LANGUAGE ARTS	72	77, 77

LC (#8)	4 TH MARK. PD. 1999-2000 sch. yr.	2 ND AND 3 RD MARK. PD. 2000-2001 school year
MATH	83	84, 77
LANGUAGE ARTS	78	86, 85

KG (#9)	4 TH MARK. PD. 1999-2000 sch. yr.	2 ND AND 3 RD MARK. PD. 2000-2001 school year
MATH	56	73, 70
LANGUAGE ARTS	65	70, 69

HR (#10)	4 TH MARK. PD. 1999-2000 sch. yr.	2 ND AND 3 RD MARK. PD. 2000-2001 school year
MATH	80	78, 84
LANGUAGE ARTS	53	50, 63

DD (# 11)	4 TH MARK. PD. 1999-2000 sch. yr.	2 ND AND 3 RD MARK. PD. 2000-2001 school year
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MATH	69	65, 75
LANGUAGE ARTS	70	70, 73

CD (# 12)	4 TH MARK. PD. 1999-2000 sch. yr.	2 ND AND 3 RD MARK. PD. 2000-2001 school year
MATH	67	68, 71
LANGUAGE ARTS	50	50, 58

AH (#13)	4 TH MARK. PD. 1999-2000 sch. yr.	2 ND AND 3 RD MARK. PD. 2000-2001 school year
MATH	50	62, 50
LANGUAGE ARTS	50	55, 53

DD (#14)	4 TH MARK. PD. 1999-2000 sch. yr.	2 ND AND 3 RD MARK. PD. 2000-2001 school year
MATH	82	84, 85
LANGUAGE ARTS	58	66, 63

TK (#15)	4 TH MARK. PD. 1999-2000 sch. yr.	2 ND AND 3 RD MARK. PD. 2000-2001 school year
MATH	59	55, 58
LANGUAGE ARTS	50	50, 50

BO (#16)	4 TH MARK. PD. 1999-2000 sch. yr.	2 ND AND 3 RD MARK. PD. 2000-2001 school year
MATH	81	84, 82
LANGUAGE ARTS	82	86, 88

AH(#17)	4 TH MARK. PD. 1999-2000 sch. yr.	2 ND AND 3 RD MARK. PD. 2000-2001 school year
MATH	62	60, 65
LANGUAGE ARTS	70	68, 73

DW (#18)	4 TH MARK. PD. 1999-2000 sch. yr.	2 ND AND 3 RD MARK. PD. 2000-2001 school year
MATH	72	71, 69
LANGUAGE ARTS	70	74, 69

DV (#19)	4 TH MARK. PD. 1999-2000 sch. yr.	2 ND AND 3 RD MARK. PD. 2000-2001 school year
MATH	92	90, 88
LANGUAGE ARTS	90	91, 86

NT (#20)	4 TH MARK. PD. 1999-2000 sch. yr.	2 ND AND 3 RD MARK. PD. 2000-2001 school year
MATH	66	68, 63
LANGUAGE ARTS	53	70, 67

KC	4 TH MARK. PD. 1999-2000 sch. yr.	2 ND AND 3 RD MARK. PD. 2000-2001 school year
MATH	85	84, 88
LANGUAGE ARTS	82	86, 83

KE (#21)	4 TH MARK. PD. 1999-2000 sch. yr.	2 ND AND 3 RD MARK. PD. 2000-2001 school year
MATH	55	50, 58
LANGUAGE ARTS	60	67, 50

BL (#22)	4 TH MARK. PD. 1999-2000 sch. yr.	2 ND AND 3 RD MARK. PD. 2000-2001 school year
MATH	68	84, 83
LANGUAGE ARTS	75	86, 77

CC (#23)	4 TH MARK. PD. 1999-2000 sch. yr.	2 ND AND 3 RD MARK. PD. 2000-2001 school year
MATH	70	66, 69
LANGUAGE ARTS	74	72, 76

LS (#24)	4 TH MARK. PD. 1999-2000 sch. yr.	2 ND AND 3 RD MARK. PD. 2000-2001 school year
MATH	66	66, 65
LANGUAGE ARTS	75	86, 77

AJ (#25)	4 TH MARK. PD. 1999-2000 sch. yr.	2 ND AND 3 RD MARK. PD. 2000-2001 school year
MATH	67	65, 74
LANGUAGE ARTS	77	79, 84

AM (#26)	4 TH MARK. PD. 1999-2000 sch. yr.	2 ND AND 3 RD MARK. PD. 2000-2001 school year
MATH	84	84, 82
LANGUAGE ARTS	81	86, 88

SP (#27)	4 TH MARK. PD. 1999-2000 sch. yr.	2 ND AND 3 RD MARK. PD. 2000-2001 school year
MATH	75	84, 78

LANGUAGE ARTS	60	61, 57
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BL (#28)	4 TH MARK. PD. 1999-2000 sch. yr.	2 ND AND 3 RD MARK. PD. 2000-2001 school year
MATH	55	58, 50
LANGUAGE ARTS	65	66, 71

TF (#29)	4 TH MARK. PD. 1999-2000 sch. yr.	2 ND AND 3 RD MARK. PD. 2000-2001 school year
MATH	65	67, 64
LANGUAGE ARTS	73	86, 81

KL (#30)	4 TH MARK. PD. 1999-2000 sch. yr.	2 ND AND 3 RD MARK. PD. 2000-2001 school year
MATH	77	84, 79
LANGUAGE ARTS	85	86, 81

RW (# 31)	4 TH MARK. PD. 1999-2000 sch. yr.	2 ND AND 3 RD MARK. PD. 2000-2001 school year
MATH	86	87, 87
LANGUAGE ARTS	58	55, 62

WG (#32)	4 TH MARK. PD. 1999-2000 sch. yr.	2 ND AND 3 RD MARK. PD. 2000-2001 school year
MATH	74	84, 75
LANGUAGE ARTS	63	86, 69

NB (#33)	4 TH MARK. PD. 1999-2000 sch. yr.	2 ND AND 3 RD MARK. PD. 2000-2001 school year
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MATH	80	84, 81
LANGUAGE ARTS	85	86, 89

DM (#34)	4 TH MARK. PD. 1999-2000 sch. yr.	2 ND AND 3 RD MARK. PD. 2000-2001 school year
MATH	50	50, 57
LANGUAGE ARTS	74	86, 77

AK (#35)	4 TH MARK. PD. 1999-2000 sch. yr.	2 ND AND 3 RD MARK. PD. 2000-2001 school year
MATH	63	66, 65
LANGUAGE ARTS	69	67, 50

BC (#36)	4 TH MARK. PD. 1999-2000 sch. yr.	2 ND AND 3 RD MARK. PD. 2000-2001 school year
MATH	70	84, 83
LANGUAGE ARTS	71	79, 74

AS (#37)	4 TH MARK. PD. 1999-2000 sch. yr.	2 ND AND 3 RD MARK. PD. 2000-2001 school year
MATH	50	50, 54
LANGUAGE ARTS	50	58, 61

AB (#38)	4 TH MARK. PD. 1999-2000 sch. yr.	2 ND AND 3 RD MARK. PD. 2000-2001 school year
MATH	74	84, 85
LANGUAGE ARTS	85	86, 81

RB (#39)	4 TH MARK. PD. 1999-2000 sch. yr.	2 ND AND 3 RD MARK. PD. 2000-2001 school year
MATH	50	50, 50
LANGUAGE ARTS	52	50, 56

AY (#40)	4 TH MARK. PD. 1999-2000 sch. yr.	2 ND AND 3 RD MARK. PD. 2000-2001 school year
MATH	58	56, 57
LANGUAGE ARTS	85	86, 84

MM (#41)	4 TH MARK. PD. 1999-2000 sch. yr.	2 ND AND 3 RD MARK. PD. 2000-2001 school year
MATH	92	84, 88
LANGUAGE ARTS	93	93, 94

CM (#42)	4 TH MARK. PD. 1999-2000 sch. yr.	2 ND AND 3 RD MARK. PD. 2000-2001 school year
MATH	65	66, 64
LANGUAGE ARTS	63	77, 71

KD (#43)	4 TH MARK. PD. 1999-2000 sch. yr.	2 ND AND 3 RD MARK. PD. 2000-2001 school year
MATH	50	50, 50
LANGUAGE ARTS	50	50, 50

JB (#44)	4 TH MARK. PD. 1999-2000 sch. yr.	2 ND AND 3 RD MARK. PD. 2000-2001 school year
MATH	65	67, 68
LANGUAGE ARTS	55	50, 56

CS (#45)	4 TH MARK. PD. 1999-2000 sch. yr.	2 ND AND 3 RD MARK. PD. 2000-2001 school year
MATH	78	76, 75
LANGUAGE ARTS	88	86, 88

SD (#46)	4 TH MARK. PD. 1999-2000 sch. yr.	2 ND AND 3 RD MARK. PD. 2000-2001 school year
MATH	87	84, 85
LANGUAGE ARTS	87	86, 81

KM (#47)	4 TH MARK. PD. 1999-2000 sch. yr.	2 ND AND 3 RD MARK. PD. 2000-2001 school year
MATH	71	84, 75
LANGUAGE ARTS	82	86, 83

JV (#48)	4 TH MARK. PD. 1999-2000 sch. yr.	2 ND AND 3 RD MARK. PD. 2000-2001 school year
MATH	64	50, 58
LANGUAGE ARTS	72	86, 70

CH (#49)	4 TH MARK. PD. 1999-2000 sch. yr.	2 ND AND 3 RD MARK. PD. 2000-2001 school year
MATH	72	85, 80
LANGUAGE ARTS	85	74, 50

KT (#50)	4 TH MARK. PD. 1999-2000 sch. yr.	2 ND AND 3 RD MARK. PD. 2000-2001 school year
MATH	71	66, 63

LANGUAGE ARTS	82	80, 84
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LM (#51)	4 TH MARK. PD. 1999-2000 sch. yr.	2 ND AND 3 RD MARK. PD. 2000-2001 school year
MATH	61	62, 66
LANGUAGE ARTS	65	64, 67

BM (#52)	4 TH MARK. PD. 1999-2000 sch. yr.	2 ND AND 3 RD MARK. PD. 2000-2001 school year
MATH	55	68, 66
LANGUAGE ARTS	59	65, 71

KJ (#53)	4 TH MARK. PD. 1999-2000 sch. yr.	2 ND AND 3 RD MARK. PD. 2000-2001 school year
MATH	75	84, 81
LANGUAGE ARTS	70	86, 73

JJ (#54)	4 TH MARK. PD. 1999-2000 sch. yr.	2 ND AND 3 RD MARK. PD. 2000-2001 school year
MATH	70	74, 704
LANGUAGE ARTS	98	98, 95

DK (#55)	4 TH MARK. PD. 1999-2000 sch. yr.	2 ND AND 3 RD MARK. PD. 2000-2001 school year
MATH	65	66, 68
LANGUAGE ARTS	87	86, 89

AH (#56)	4 TH MARK. PD. 1999-2000 sch. yr.	2 ND AND 3 RD MARK. PD. 2000-2001 school year
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MATH	63	84, 73
LANGUAGE ARTS	78	86, 88

DB (#57)	4 TH MARK. PD. 1999-2000 sch. yr.	2 ND AND 3 RD MARK. PD. 2000-2001 school year
MATH	78	84, 70
LANGUAGE ARTS	60	66, 71

SB (#58)	4 TH MARK. PD. 1999-2000 sch. yr.	2 ND AND 3 RD MARK. PD. 2000-2001 school year
MATH	85	84, 86
LANGUAGE ARTS	87	86, 79

MW (#59)	4 TH MARK. PD. 1999-2000 sch. yr.	2 ND AND 3 RD MARK. PD. 2000-2001 school year
MATH	83	84, 84
LANGUAGE ARTS	89	86, 90

After creating the above chart for each of the fifty-nine mentees based upon their academic records, a comparison of the grades took place. Two separate findings were stated. They are expressed in terms of percentage of students improving in language arts after the mentoring program inception and percentage of students improving in math after the mentoring program inception.

A reflective journal was also utilized for recording major ideas and discussing the issues related to those ideas. The comments in the reflective journal generally focused on the following:

- Me and how I did
- Me and how others viewed me (my perceptions of how others perceive me)
- Others and my perceptions of them
- Others and other peoples perceptions of them
- Is what I say, what I do? (expoused theory vs. theory in practice)
- Current research says..., but I/We do this...
- What degree of collaboration takes place in our schools?

In addition to measuring the effectiveness of the mentoring program in the fashion described above, the mentors and mentees had the opportunity to reflect upon their experiences and provide feedback. A questionnaire was distributed to both mentor and mentee at the conclusion of the third marking period. The following questions were asked of the mentors:

1. Does your mentee talk more positively about school?
2. Has the mentee's attendance improved between last year and this year?
3. Has the mentee's involvement with the school disciplinary system decreased between last year and this year?
4. How often do you meet with your mentee?
5. What sort of activities do you do with your mentee?
6. Do you feel the mentoring program has had a positive impact on the overall behavior of your mentee?

The mentee's will be asked the following questions:

1. Do you enjoy school?
2. Do you enjoy school more than this year than last year? If yes, why?
3. Has your attendance improved between last year and this year?
4. Has your involvement with the school's disciplinary system decreased between last year and this year?
5. How often have you met with your mentor?

6. What sort of activities do you do with your mentee?
7. Do you feel the mentoring program has had a positive impact on your overall behavior?

These questionnaires went out to every mentor and every mentee who had participated in the mentoring program from its inception in September of 2000. The questionnaire was collected and the answers were reviewed for the purpose of identifying common perceptions held by the mentors and those held by the mentees. Cross comparisons between mentor responses and mentee responses were also done to determine if the perceptions of the program are congruent or if they differ, and if so, how great are the differences.

Chapter 4

Presentation of the Research Findings

As the charts below indicate, a majority of the students' grades improved in both math and language arts between the 4th marking period of the 1999-2000 school year and the 2nd marking period of the 2000-001 school year. During this period, 11.8% of the students' math grades remained the same. 50.8% had their math grade rise and 37.2 % had it decline. In language arts, the improvement was greater. While 10.1 % of the students saw their grade remain the same, 62.7% of the students had their grades go up and 27.1% had them go down.

Likewise, between the 4th marking period of the 1999-2000 school year and the 3rd marking period of the 2000-2001 school year, a majority of the students' grades improved in both math and language arts. In math 55.9% of the students saw their grades improve, 38.9% had them decline, and 5% had their grade remain the same. In language arts the gains were again greater. 71.1% of the students had their grades go up and 23.7% had them go down. 5% had their grades stay the same.

Grade Comparisons

Raw Numbers (total-59 students)

4th Marking Period to 2nd Marking Period

	SAME	UP	DOWN
MATH	7	30	22
LANG. ARTS	6	37	16

4th Marking Period to 3rd Marking Period

	SAME	UP	DOWN
MATH	3	33	23
LANG. ARTS	3	42	14

Percentages (%)

4th Marking Period to 2nd Marking Period

	SAME	UP	DOWN
MATH	11.8%	50.8%	37.2%
LANG. ARTS	10.1%	62.7%	27.1%

4th Marking Period to 3rd Marking Period

	SAME	UP	DOWN
MATH	5%	55.9%	38.9%
LANG. ARTS	5%	71.1%	23.7%

What does the data described above mean? Put most simply, it means a majority of the students saw an improvement in both math and language arts grades from the last marking period before the mentoring program was begun and the first two full marking periods (2nd and 3rd marking periods) after the mentoring program was in place.

Could the data indicate that there is a correlation between mentoring and improved grades? Perhaps, however there are many complex factors that influence how well a student does in school--most of which are independent of the mentoring process. So it would be unwise to state that simply because grades improved during the time the mentoring program was in effect, that the improvement was as a result of the mentoring being done. The results are congruent however with the majority of the studies conducted on the link between mentoring and student achievement. The findings are certainly encouraging and reinforce the students researched by this intern.

Survey Results

Below are the questions asked of the mentors and mentees, and their respective answers. Unless otherwise indicated, in the parenthesis following the question is the

percentage of respondents answering in the affirmative. The questionnaire was distributed in late January 2001. Fifty-three (53) of the fifty-nine (59) mentors in the program completed the survey distributed and forty-one (41) of the mentees completed and returned their surveys.

Mentor questions:

1. Does your mentee talk more positively about school? (42%)
2. Has the mentee's attendance improved between last year and this year? (67%)
3. Has the mentee's involvement with the school disciplinary system decreased between last year and this year? (23%)
4. How often do you meet with your mentee? (51% of the mentors said they met 2 times each week, 33% said 1 time per week, and 16% said they met 3 or more times.)
5. What sort of activities do you do with your mentee? (94% of the mentors said they had called the mentee's home at least once. 70% of the mentors responded that they met with their mentee during school either in class, in the cafeteria, or in the hallways to speak with their mentee and discuss how things were going. 62% said they had sent notes, letters, or cards to their mentee at least once during the school year. 36% said they had had lunch with their mentee. 14% shared that they had spent time with their mentee at a school after school activity--such as a sports event or other extracurricular activity. Finally 6% said they met with their mentee outside of the normal school day.
6. Do you feel the mentoring program has had a positive impact on the overall behavior of your mentee? (31%)

Mentee questions:

7. Do you enjoy school? (39%)
8. Do you enjoy school more than this year than last year? If yes, why? (41% said yes. 35% who said they enjoyed school more this year than last said it was due to having a different teacher, 22% said they liked their grade level better, 13% said it was because of the mentoring program, and 4% said it was because they like the school better. 26% did not state a reason.
9. Has your attendance improved between last year and this year? (41%)

10. Has your involvement with the school's disciplinary system decreased between last year and this year? (19%)
11. How often have you met with your mentor? (47% of the mentees said they met 1 times each week, 41% said 2 time per week, and 11% said they met 3 or more times.)
12. What sort of activities do you do with your mentee? (85% of the mentees who responded said they had talked to their mentor during school time somewhere within the school. 60% of the mentees said that they had talked on the phone with their mentor. 41% said that they had received a gift, card or letter from their mentor. 23% said they had eaten lunch with their mentor. 6% stated they had attended a school function with their mentor. Finally, 4% said that they had met with their mentee outside of school
13. Do you feel the mentoring program has had a positive impact on your overall behavior? (56%)

The meaning of the mentor and mentee answers is more ambiguous than the data previously discussed. Apparently a small majority (56%) of the mentees think that the mentoring program has had a positive impact on their overall behavior. 41% of the mentees said they enjoyed school more this year than last year and of that 41%, 13% said it was because of the mentoring program. 41% of mentees said their attendance has improved this year and 19% said their involvement with the school's disciplinary system decreased this year.

The mentors' responses were similar in nature, however only 31% of the mentors thought that the mentoring program had had a positive impact on the overall behavior of their mentee, compared to 56% of the mentees' themselves. 42% of the mentors stated that their mentee talked positively about school. Almost one quarter of the mentors thought that their mentee's involvement with the school's disciplinary system decreased between last year and this year and 67% of the mentors said that the mentee's attendance had improved between last year and the current school year.

The questionnaire responses and the numerical data taken together seem to indicate that the mentoring program may be having a positive, albeit, modest impact on Woodbury's at-risk student population. There are an infinite number of reasons to explain the success (as defined as the improvement in math and language arts grades) that some of the mentee have experienced during part (2nd and 3rd marking period) of the current school year. One possible explanation is the benefit derived from the mentoring delivered by the Woodbury staff and faculty members who have volunteered to help "at-risk" 7th, 8th and 9th graders.

The research indicates that when students feel valued and cared about, and are encouraged to work hard, they often invest more time and energy into their academic work than they would otherwise. Likewise, studies have shown that students who have support academically often fare better than their peers who do not. The mentoring program at Woodbury Junior/Senior High School was designed so the mentor would serve as a teacher, advisor, and sponsor--depending on the needs of the child--who encouraged, praised, and prodded, thereby bolstering the mentee's sense of competence and self-concept. It appears that this research project in some small measure has corroborated those research studies that correlate mentoring programs with different definitions of "success."

Chapter 5

Conclusions, Implications and Further Study

The conclusion reached by this intern is that a school-based mentoring program has a modest positive effect on the academic achievement in language arts and math for at-risk students in the 7th, 8th, and 9th grades. Furthermore, if one assumes, as this intern did for the purposes of this study, that increased academic achievement will lead to increased graduation rates, then it can be said that a school-based mentoring program may have a modest positive effect on graduation rates for those students participating.

It is important to keep in mind that changing behaviors is often a difficult and long-term process. All of the mentees have behaviors and attitudes that for one reason or another interfere with the academic, social, or behavioral success at school; that is precisely why they were chosen to participate in this study/program. The mentors had only five months to work with their mentees. Even in this relatively short period of time, the research findings indicate that grades improved in both math and science. In math, 50.8% of the students improved in math between the 4th and 2nd marking periods and 55.9% between the 4th and 3rd marking periods. In language arts the result was even more positive. Between the 4th and 2nd marking periods, 62.7% of the students saw grade improvement and 71.1% of the students improved between the 4th and 3rd marking period.

There is a tremendous need for further study to more accurately determine if there is in fact a correlation between school based mentoring programs and increased

graduation rates. This intern would suggest a longitudinal study to eliminate the need for the assumption necessitated in this study. Long term studies comparing the academic success and/or graduation rates of mentees with their non-mentored peers would yield results that either support or rebut the findings of this study.

The implications of this study are promising and appear to confirm the findings of previous studies. That is that mentoring programs in general, including school-based programs have the capability to improve student success, but should be thought of as a useful but modest approach for addressing students' needs. While mentoring is certainly not a panacea for the myriad of problems besetting "at-risk" students, a well designed and thoughtfully implemented mentoring programs appears to hold the promise of reducing, to some degree, the dropout rate of "at risk" students.

During the design and implementation of the mentoring program at Woodbury High School this intern utilized skills invaluable to the process of leadership development. Probably the most important leadership skill practiced was that of initiating and managing change as both a leader and a member of a leadership team. Collaboration and cooperation was necessary from start to finish. The project was too large to be handled by one person and by bringing in other "voices," this intern learned ways of doing things that otherwise would not have been considered. As much as anything else, this intern learned that social skills and diplomacy are absolutely necessary to effective leadership. Working closely and continuously with both student and staff on the mentoring program allowed this intern to refine these and other necessary skills (some would call them personal characteristics perhaps) such as magnanimity and forgiveness. Although getting along with everyone involved in the program was not

always easy, this intern recognized its the importance to the successful implementation of the program. Alienating people and making enemies only impedes the change process. Avoiding this whenever possible was something this intern practiced without exception.

The mentoring program at Woodbury Junior/Senior High School continues as of this writing. Other staff members within the school have taken over the management aspects of the program. Fifty-nine members of the faculty and staff remain committed to improving, in some small measure, the academic lives of Woodbury's neediest students. Predictions about the future continuation and/or success of the mentoring program are impossible to accurately make and are beyond the competence of this intern. It is fair to say that from the words and actions of those involved in the mentoring program, some form of mentoring will continue for many students on through this year and into the next school year.

This intern also believes that a large segment of the school has been educated about the special needs of "at-risk" students and understands the need for special attention to address their diverse and difficult issues. During the course of the mentoring program several orientation and training sessions took place for the mentors. These sessions identified needs and issues germane to "at-risk" students and discussed methods of addressing these needs within the context of a mentoring program. The information generated by this process will stay within the school for years to come and hopefully led to a greater overall understanding and sensitivity to the needs of these children. Additional programs for "at-risk" kids are needed and mentors armed with this knowledge may pursue alternative programs that could compliment and support the mentoring program.

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