A study of the effectiveness of an after-school peer tutoring/homework help program

Karen S. Symanski
Rowan University

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A STUDY OF THE EFFECTIVENESS OF AN AFTER-SCHOOL PEER TUTORING/HOMEWORK HELP PROGRAM

by
Karen S. Symanski

A Thesis
Submitted in partial fulfillment of the requirements of the Master of Arts Degree of The Graduate School at Rowan University Spring 2001

Approved by
Date Approved May 3, 2001
Abstract

Karen S. Symanski
A Study of the Effectiveness of an After-School Peer Tutoring/Homework Help Program on Student Achievement 2001
Dr. Stanley Urban
Learning Disabilities

The purpose of this study was to determine if the students in the after-school peer tutoring/homework help club made greater academic gains when compared to students who did not participate in the after-school program as measured by their grade point average.

The subjects of this study were 30 fifth, sixth, and seventh grade students from a one school district in a rural southern New Jersey town. Fifteen students were enrolled in the after-school program. Fifteen students did not attend the after-school program. Grade point averages were calculated for both groups at the end of marking periods one and two. A comparison was made both within the treatment group and between the treatment group and the control group to determine the difference in gains made by each group.

Results indicate a positive mean gain within the treatment group. Mean grade point averages increased as the number of sessions increased. Although the mean grade point average of the treatment group fell below that of the control group, the control group did not indicate any positive gains.

The findings of this study indicate no meaningful
difference in the gains made by the treatment group. The treatment group made positive gains with no regression in either group.
Mini-Abstract

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- Teachers, and tutors, for working in the after-school program which provided the information needed for this study.

- Chief School Administrator and Board of Education, for allowing research to be conducted in their district.
# Table of Contents

<table>
<thead>
<tr>
<th>Section</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>I. Acknowledgements</td>
<td>1</td>
</tr>
<tr>
<td>II. Abstract</td>
<td>1</td>
</tr>
<tr>
<td>III. Mini-abstract</td>
<td>3</td>
</tr>
<tr>
<td>IV. Chapter I-Statement of Problem</td>
<td>3</td>
</tr>
<tr>
<td>Background</td>
<td>3</td>
</tr>
<tr>
<td>Theory</td>
<td>4</td>
</tr>
<tr>
<td>Need for the Study</td>
<td>4</td>
</tr>
<tr>
<td>Value of the Study</td>
<td>5</td>
</tr>
<tr>
<td>Research Question</td>
<td>6</td>
</tr>
<tr>
<td>Limitations</td>
<td>6</td>
</tr>
<tr>
<td>Definitions</td>
<td>6</td>
</tr>
<tr>
<td>V. Chapter II-Review of Literature</td>
<td>7</td>
</tr>
<tr>
<td>How Does Homework Affect Student Achievement?</td>
<td>7</td>
</tr>
<tr>
<td>The Need for After-School Programs</td>
<td>9</td>
</tr>
<tr>
<td>What Type of After-School Programs Are</td>
<td>11</td>
</tr>
<tr>
<td>Presently Available?</td>
<td>11</td>
</tr>
<tr>
<td>How Do They Affect Student Achievement?</td>
<td>11</td>
</tr>
<tr>
<td>What Are the Non-Academic Outcomes of</td>
<td>13</td>
</tr>
<tr>
<td>After-School Programs?</td>
<td>13</td>
</tr>
<tr>
<td>What Are the Benefits of Peer Tutoring?</td>
<td>15</td>
</tr>
<tr>
<td>Summary</td>
<td>17</td>
</tr>
</tbody>
</table>
VI. Chapter III-Design of Study ........................................... 19
    Population .............................................................. 19
    Method of Sample Selection ........................................... 19
    Treatment Procedure ................................................ 20
    Collection and Analysis of Data ................................. 21
    Sample Tables ......................................................... 22

VII. Chapter IV-Analysis of Results ................................. 23

VIII. Chapter V-Summary, Conclusion, and Discussion .......... 27
    Summary ....................................................................... 27
    Conclusion .............................................................. 28
    Discussion .................................................................... 29

IX. References .............................................................. 30
Chapter I

Statement of the Problem

Background

In the early part of the 20th century many school districts declared a total ban on homework. But in the 1950s, as the U.S. struggled to keep up with other countries in science and math, teachers increased the workload. Homework became a part of the school curriculum.

The opinions on the need for homework and how much time our children should spend on homework each day vary greatly. Thelma Farley, founder of the Beacon Day School in Oakland, California believes that a longer school year with no homework until the sixth grade is the answer. Her view is somewhat supported by Neil Harding of Paramus, New Jersey who states in "The Record" (Bergen County, NJ), "homework was okay for the 19th and early 20th century in order to shorten the school day so that children could help on the farm. Today however instead of holding class for 40 minutes and issuing 20 minutes of practice work to be done at home, let's lengthen the school day and hold class for 60 minutes." Homework policies defining how much work kids in each grade should bring home
have been developed.

In 1981 the average amount of time U.S. grade school students spent on homework each week was 85 minutes. By 1997 the average time had increased to 134 minutes. Working parents often struggle to help their children divide their time between evening activities and the need for their children to complete assigned homework.

Our Attorney General, Janet Reno, along with Richard W. Riley, the Secretary of Education, in an April, 2000 letter (Reno & Riley, 2000), cited statistics that show most juvenile crime is committed between the hours of 2:00 and 8:00 p.m. The largest spike in the number of offenses occurs in the hours immediately following students' release from school. They believe an investment in after-school programs is the best deterrent against juvenile crime and victimization. The U.S. Department of Education and the U.S. Department of Justice first published a guide entitled "Safe and Smart: Making the After-School Hours Work for Kids." They recently updated this guide with "Working for Children and Families: Safe and Smart After-School Programs," (Department of Education, 1998). Schools are being encouraged to apply and use grant money to develop quality after-school programs. Extensive research has been completed on the practice of cross-age peer tutoring. Studies have shown many benefits for both the tutor and tutee. Many outcomes are difficult to
assess but can be observed while watching the interaction that takes place between the students as they work together.

Theory
The theory underlying this program is that the school can help support both parents and students in many ways by providing a quality after-school program. Since homework should be additional practice or an extension of what was taught during the school day, teachers and students who understand the subject material best can help students with their homework. This extra time also allows the teacher to reteach any skill that the student may not have understood thereby assuring that the student is practicing the skill correctly. Although not easily measurable and not the focus of this study, the interaction in a more relaxed setting can help teachers learn about individual needs in a small group setting. This interaction may indirectly affect the attitude of the teacher and student which in turn could effect student achievement. Tutors can reinforce their own learning through teaching others and modeling good behavior and attitudes about the need to complete homework correctly.

Need for the Study
At the present time it appears that homework will continue to be assigned in varying degrees at all grade levels. The need, benefits, and shortage of quality after-school programs has been well documented. However, it is important that we
assess each of our after-school programs to determine how effective they are in meeting the goals they set forth. When a school receives grant money to provide a program, administrators charged with working under budget constraints, often ask if the program is the most effective use of the funding. This study will attempt to provide that information by looking at this program's effectiveness on student achievement.

Value of the Study

There is a chronic shortage of after-school programs. Demand for school-based after-school programs outstrips supply at a rate of two to one. (Washington, DC: U.S. Department of Education, 1998). If this after-school program is effective in helping students use their time in a more constructive manner and affects their achievement in a positive manner, then the school district may want to continue allocating funds for this program each year. If there is no measurable growth in student achievement and no other positive outcomes can be identified, then the district may want to reconsider the purpose for this program, and the justification used for expending funds on this program.

In addition, this study will contribute to the body of data which is attempting to determine what factors contribute to improved academic achievement.
Research Question

The data obtained in this study will be used to answer the following research questions:

Question 1-How effective is the after-school peer tutoring/homework help program on student achievement?

Question 2-Do students make greater gains when receiving help in the after-school peer tutoring/homework help club when compared to students who do not receive the extra help as measured by their grade point average.

Limitations

When generalizing the results, one must be cautious considering the make-up of the sample studied. Students chosen for the study were those who voluntarily signed up, were signed up by their parents, or were encouraged by their teachers to stay for after-school help. Although an attempt to choose students with common abilities was made, each student and each teacher and tutor working with the students are unique. The instrument being used to evaluate student achievement does not take into consideration the variation in expectations by the teachers who assign the grades. Therefore issues of reliability and validity of the measurement instrument pose threats to the conclusions drawn from this study. Although the time period of one marking period is the
same for each group, data gathered over a longer time period may prove to be more reliable.

**Definitions**

The two terms, cross-age tutors, and homework used in this study will be defined as the following:

**Cross-age tutoring**—method of instruction in which students in higher grade levels help one or more younger student learn or practice a skill or concept.

**Homework**—any school work assigned to be completed after the regular school day hours.
Chapter II
Review of the Literature

How does homework affect student achievement?

How much homework should a child be given each evening? At what grade level should students begin to receive homework?

"In just about any classroom you probably find some parents who think their child isn't getting enough homework and others who think she's getting too much" (Bennett, 1999). Homework is a highly debated issue which has led some schools to develop extensive homework policies. The National PTA issued a guideline in 1996 called the ten minute rule. Ten minutes a night for first grade, with ten-minute increases for each succeeding grade. The question however remains, how does homework affect student achievement?

According to Kralovec & Buell (1999), research and historical experience fail to demonstrate the necessity or efficacy of ever longer hours of homework. Their sentiments are echoed by Cooper (1998), in her study which concludes that the effect of homework on achievement is trivial if it exists at all until middle school. She further states that piling on massive amounts of homework will not lead to gains and could
possibly be detrimental by causing children to question their abilities.

Responding to Cooper, Bennet (1999), states that her theories are "a bunch of rot." He believes that homework is an indispensable ingredient in the recipe for school success. It gives students an opportunity to review, reinforce and practice their lessons. It further builds several habits which are necessary for academic achievement such as how to follow directions, better organizational skills, and how to budget time. Bennet also sees homework as a line of communication between parents and the school.

Professors Anderson, Reder, and Simon, of Carnegie-Mellon University note in Robinson (1998) that after twenty years of research, real competence only comes with extensive practice. Homework which is assigned for good reasons and is directly correlated to the school day's lesson increases time on task. This predicts what a child will learn and helps them to achieve.

In a five year study by Betts (1999), examining homework habits of 6,000 students who did an extra thirty minutes of math homework beginning in seventh grade concluded by 11th grade they would see their achievement level soar by the equivalent of two grades. Noting that his study was limited to students in junior high and high school, he argues that the amount of time spent on homework is a better indicator of how
students perform than the size of the class or the quality of teachers.

As with most controversial issues research evidence is found to support both sides of the issues. What all research does appear to support is that the quality not quantity and relevance of the homework being assigned is of utmost importance. Teacher communication about expectations for homework and the parents willingness to participate in the learning process with their children will still be the best indicators of student achievement.

The Need for After-School Programs

Each year the need for quality after-school programs increases. As more parents work outside of the home often due to economic necessity, our children are coming home to empty houses (Reno & Riley, 2000).

According to the Bureau of Labor Statistics (1997), more than 28 million school-age children have parents who work outside the home. The United States Department of Education (1999), reports six million children in grades K-8 participate in before and after school programs. The gap between parents' work schedules and their children's school schedules can amount to 20 to 25 hours per week (American Youth Forum, 1999). According to a public survey by Lake, Snell & Perry, Tarrance Group, (1998), 92% of all voters favor providing school-based after-school programs in their community.
The National Education Commission on Time and Learning (1994) found that when school-age children and teens are unsupervised during hours after school they are more likely to become involved with the use of alcohol, drugs, tobacco, and criminal behavior. They will often be the students who will display more behavior problems, and drop out of school than those students who are given the opportunities to participate in activities supervised by adults.

As presented in a Kaiser Family Foundation report (1999) the most frequent activity for children during nonschool hours is television watching. On average they are watching almost three hours of television per day with about 17 percent of children regularly watching more than five hours of television every day. Children are watching programs that are not specifically designed for them. This activity has been associated with increased aggressive behavior and other negative consequences.

In a United States Justice report by Snyder and Sickmund (1999), some alarming findings were presented. Crimes involving firearms committed by juveniles peak at 3 p.m. on school days, the hour that the youths leave school. The most likely hour of a school day for a juvenile to commit a sexual assault is between 3 p.m. and 4 p.m. In Orange County, California gang crimes by juveniles peaks immediately after-school dismissal. Children are also at a much greater risk of
being the victim of a violent crime in the four hours following the end of the school day. While seeking answers to these problems, Mastrofski and Keeter (1999) conducted a poll of police chiefs around the country. They found that 86 percent of the police chiefs agreed that expanding after-school programs and educational child care programs would greatly reduce youth crime and violence.

Mayor Richard M. Daley of Chicago reacts to these finds as stating, "Instead of locking youth up, we need to unlock their potential. We need to bring them back to their community and provide the guidance and support they need."

What type of after-school programs are presently available and how do they affect student achievement?

Although there continues to be a significant need for after-school programs, many programs have already been implemented both in our schools and in our communities. In preliminary research there is an indication that student achievement is positively affected by these programs when compared to past performance and to control groups made up of similar students.

Both community based and school based programs are showing positive results for our children. Schinke (1999), reports that a program developed by The Boys & Girls Club of America known as Project Learn: The Educational Enhancement Program (EEP), showed an increase in students' grade average.
and improved school attendance and study skills. This program was designed to provide homework help and tutoring, high-yielding learning and leisure activities, parent involvement, collaboration with schools, and incentives. In Palm Beach County, Florida the 21st Century Community Center Program Lacey, (2000) finds that students who participate in their after-school program have increased reading and math scores. These students also have shown better interpersonal and self-management skills.

Some churches have opened their doors to after-school programs. In Louisiana a Church-Based After-School Tutorial Network has been developed. This program operates in sites throughout the state and targets at-risk children in grades K-8. The Louisiana Department of Education (1996) reports, increases in students' grade averages in both math and language arts, depending on the number of years they attended.

School-based programs have been developed throughout the country and are showing positive findings as well. According to Gregory (1996) a school-based after-school program in Manchester, New Hampshire is helping students improve in reading and math as indicated on the state test. Since the inception of the Y.O.U. program the percentage of students scoring at or above the basic level in reading increased significantly. In math the percentage of students scoring at the basic level increased from 29 percent to almost 60
percent. More than one-half of the students participating in this program have earned better grades than before as reported by their teachers. Chicago Public Schools (1998) began a city-wide program called the Chicago Lighthouse Program. Of the 40 schools involved in the program 30 schools showed achievement gains in average reading scores and 39 schools showed gains in average math scores.

When looking at an after-school program for predominantly Hispanic, low-income students Baker and Witt (1995) report that involvement in after-school activities, at least three activities per week, had the greatest impact on academic performance.

What are the non-academic outcomes of after-school programs?

After-school programs can significantly benefit low-income children, children in urban or high-crime neighborhoods, younger children, and boys, (Vandell & Shumow, 1999). Some positive outcomes include, fewer behavioral problems in school, better social skills, improved self-confidence which leads to more cooperation with adults and peers. Vandell & Shumow (1999), report that children who attend after-school programs where they experience positive emotional climates exhibit fewer behavioral problems in school. In an after-school program in Manchester, New Hampshire Gregory (1996), found teachers reporting that almost one-half of students participating in the program demonstrated
fewer behavioral problems. According to a study by Posner and Vandell (1994) third graders who spent more time than their peers in after-school programs had better work habits, better relationships with peers, and better emotional adjustment.

Conflict resolution skills also appear to be enhanced according to a study by Steinberg, Riley and Todd (1993). Children can learn how to talk out problems rather than hitting and fighting. Calisi (1996) when studying a program in Georgia, found parents and children agreed that the middle school youth learned how to handle conflicts better and were getting along better with others since they began attending an after-school program.

More cooperation with adults and peers is another non-academic outcome of after-school programs. McCormick and Tushnet (1996) found in one program in Los Angeles more than 60 percent of teachers and 85 percent of parents rated children who participated in the after-school program as making some or much improvement in their ability to cooperate with peers. In another study nearly one-half of school principals and one-third of teachers reported that after-school programs caused some children to become more cooperative with adults (Steinberg, Riley & Todd, 1993).

After-school programs also helps to improve social skills. Belle and Burr (1997) state that their research indicates children with the opportunity to make social connections
during after-school hours are better adjusted and happier than those who do not. Terao (1997) reports that when evaluating eight sites in the Save the Children Out-of School Time Rural Initiative that 72 percent of youth, ages 12-18, showed improvement in social skills.

A final non-academic outcome is improved self confidence. This appears to be developed through caring relationships with adults and peers. Research identifies a common characteristic of resilient children as having a stable relationship with one or more caring adult (Miller, 1996). The Carnegie Council on Adolescent Development (1994) states children, especially adolescents, say that they want and seek caring adults they can trust, who listen to and respect them. Gregory (1996) reports an astounding figure from one after-school program. One hundred percent of youths participating in the Y.O.U. after-school program in Manchester, New Hampshire said that the program helps them feel proud of themselves. The youth went on to report that the staff was a popular source of advice when they had a problem, second only to family members.

What are the benefits of Peer Tutoring?

The Office of Educational Research and Improvement reports decades of research have established that well-planned peer tutoring programs can improve not only student achievement but effect their self-esteem. Overall school climate will also be positively effected by a program that is
tailored to the needs of each school.

Cohen (1986), states that peer and cross-age tutoring are effective for the tutee for a variety of reasons. First children have certain advantages over adults in teaching peers. Tutees' problems may be more easily understood by the tutor because they are cognitively closer. When their "cognitive framework" is similar peer tutors may present subject matter in terms their tutees understand. Cohen notes that Allen and Feldman (1976) found in their study of peer tutors some third and sixth graders were more accurate than the experienced teachers in determining from nonverbal behavior whether their agemates truly understood the lessons presented to them. He further reports that tutors can also effectively model study skills such as concentrating on the material, organizing work habits, and asking questions. When the tutor is close in age or of the same ethnic or social background an at-risk child may more easily identify with the student tutor than with an adult. In Cross-age tutoring higher status also promotes effective modeling while at the same time retaining considerable similarity.

Although many tutoring programs have been developed to help students who are struggling academically research finds that student tutors benefit on many levels. Fiscus (2000) notes in her article concerning student leadership activities that one principal found the power to make a difference in the
lives of young people works for the older students even as they are helping the younger students. Tutors' self-esteem rises as they see their tutees improve. In the Coca-Cola Valued Youth Program (VYP) developed by the Intercultural Development Research Association, Gaustad (1992) reports that tutors when realizing that they were role models for their tutees stopped skipping classes and behaving disruptively. Tutors also benefit academically from tutoring. In a research study completed at the University of Toronto's Ontario Institute for Studies in Education, Degliantoni (1997) reports that doctoral candidate Alison Inglis found that the act of guiding younger children through lessons helped to solidify the tutors' skills in that subject area. When tutors organize material to teach this "facilitates long-term retention, as well as aiding in the formation of a more comprehensive and integrated understanding" (Cohen, 1986). Tutoring can also provide opportunities for tutors to practice and improve their communication skills and work habits.

Summary

The debate about how much homework a child should be assigned has now found its way into the mainstream media. Homework is discussed on early morning talk shows and articles are being written in our parent and news magazines. It appears everyone has their own opinions and research on this "hot" topic. Much of the debate appears to be the result of
the need to support the changes in our family structures, working patterns, and the desires of parents to involve their children in extracurricular activities. Parents struggle to keep the balance between being a good employee and a good parent. Due to this struggle, the demand for after-school programs increases each year. Schools and community organizations recognizing the need are continuing to develop new programs, as our governmental agencies promise more funding to help support these programs. As programs are developed, it is important that we fashion our programs around the needs of our children. Parents, teachers, administrators and community leaders in their haste to fill a void must be careful not to increase the pressures on our children. Our after-school programs need to be planned carefully and assessed frequently to determine their effectiveness on improving both the academic and social development of our children.
Design of the Study  
Chapter III  

Population  
The population for the study consisted of two groups of 15 fifth, sixth and seventh grade students. Group one (treatment group) attends the after-school peer tutoring/homework help club which meets two times per week under the guidance of a certified teacher. Group two (control group) does not attend the after-school program. All of the students attend a one school district in a rural southern New Jersey town with a total enrollment of 432 students. The students are assigned to a fifth, sixth or seventh grade heterogeneously grouped homeroom. They attend their non-academic activities, world language, music, art and physical education with their homeroom. Students are homogeneously grouped by grade level for Social Studies, Science, Math, English and Reading according to their ability.  

Method of Sample Selection  
The sample used in this study was determined by choosing students in grades five, six and seven who are in the same reading group by grade level. Group one consists of students
who joined the after-school peer tutoring/homework help club with the permission of their parents. Group two consists of students who did not join the after-school peer tutoring/homework help club. The sample for each group consisted of diverse backgrounds, predominantly of White students. Group one consisted of 7 White, 4 Black, 3 Hispanic, and 1 student of another race. In this group 7 of the subjects were male and 8 were female. Group two consisted of 11 White, 2 Black, and 2 Hispanic students. The gender break down of group two was 8 males and 7 females.

**Treatment Procedure**

The subjects in the treatment group were placed with six or seven other students which met two times per week for one hour each session in a fifth, sixth or seventh grade classroom. Each group was assigned a certified teacher. The average years of experience of the teachers working at these grade level are 18 years. Each teacher was assigned one peer tutor to help assist with the student's homework. Each tutor was at least one grade level above the students they assisted. Each teacher kept attendance for their group and was expected to work directly with the students. Tutors documented all assignments they assisted with listing them by subject on a pre-made form. Tutees documented assignments completed by subject on a similar form. All forms were signed by the teacher assigned to the group to verify that the work was
completed. All documentation was turned into the program
coordinator at the end of each session. Transportation home
was provided for each student attending the program.

Collection and Analysis of Data

Data for this study was gathered by calculating Grade
Point Averages (GPA) for the first two marking periods on all
subjects in the study. To determine grade point averages the
values for each letter grade were as follows:

A= 4.0   B+= 3.3   C+=2.3   D+=1.3
A-= 3.7   B= 3.0   C= 2.0   D= 1.0
B-= 2.7   C-=1.7   D-= .7

Grade point averages were recorded for each subject in both
the treatment and control group by marking period. As noted
in the Tables I and II, each subject was also identified by
their grade level, gender, and ethnic background. Overall
grade point averages were determined for both the treatment
and control group for each marking period. This analysis
enabled a comparison of the students' achievement when
receiving additional services in the after-school peer
tutoring/homework club to those students not receiving
additional services.
SAMPLE TABLES

TABLE I

GROUP I - FIRST MARKING PERIOD

Attended Five Homework Club Sessions
(Treatment Group)

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TABLE II

GROUP II - FIRST MARKING PERIOD

Attended No Homework Club Sessions
(Control Group)

<table>
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<th>Subjects</th>
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Chapter IV
Analysis of Results

Interpretation of Assessment Results

The data gathered using grade point averages was analyzed by comparing differences both within the treatment group and between the treatment group and the control group. To accomplish the general purposes of this study the data obtained was used to answer the following research questions:

Question 1-How effective is the after-school peer tutoring/homework help program on student achievement?

Question 2-Do students make greater gains when receiving help in the after-school peer tutoring/homework help club when compared to students who do not receive the extra help as measured by their grade point average.

A total of thirty students were studied. Fifteen students received additional services and were considered the treatment group. Fifteen students did not receive additional services and were considered the control group. Results are recorded using grade point averages and are presented in
Table 3 and Table 4.

An inspection of Table 3 shows the subjects in the treatment group by grade, ethnic background, gender, and grade point averages. A mean grade point average for each marking period is also noted. During the first marking period subjects attended five homework club sessions. During marking period two students attended fifteen homework club sessions.

Table 3

<table>
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<tr>
<th>Subjects</th>
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</table>

*MP=marking period

Average 2.24 2.33

24
Table 4 presents parallel information for the control group. The subjects in this group did not attend any homework club sessions during marking periods one and two.

**Table 4**

**Control Group**

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<tr>
<th>Subjects</th>
<th>Grade</th>
<th>Ethnic Background</th>
<th>Gender</th>
<th>G.P.A. *MP #1</th>
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</table>

*MP=marking period  Average  2.35  2.35

When analyzing the results of this study, the mean gain within the treatment group were positive. Overall grade point averages increased as the number of after-school sessions
increased. Although the overall grade point average fell below that of the control group, the control group did not indicate any positive gains. When comparing the mean grade point average of the treatment group in marking period number one to the control group there is a .11 point difference. A comparison of the mean grade point average between the treatment group in marking period number two to the control group indicates a difference of .02.
Chapter V

Summary, Conclusion, and Discussion

Summary

The purpose of this study was to determine if the students in the after-school peer tutoring/homework help club made greater academic gains when compared to students who did not participate in the after-school program as measured by their grade point average.

The subjects of this study were 30 fifth, sixth, and seventh grade students from a one school district in a rural southern New Jersey town. Fifteen students were enrolled in the after-school peer tutoring/homework help club and fifteen students did not attend the after-school program. Grade point averages were calculated for both groups at the end of marking periods one and two. A comparison was made both within the treatment group and between the treatment group and the control group to determine the difference in gains made by each group.

Results indicate a positive mean gain within the treatment group. Mean grade point averages increased as the number of after-school sessions increased. Although the mean
grade point average of the treatment group fell below that of the control group, the control group did not show a meaningful positive gain.

The findings of this study indicate no meaningful difference in the gains made by the treatment group. The treatment group made positive gains with no regression in either group.

Conclusion

The data generated by this study supports the conclusion that progress was made in the treatment group with no meaningful difference within or between the two groups. There are many factors to consider when generalizing these findings such as the difference in the implementation of the program for the treatment group and the home support of the control group.

When analyzing the findings within the treatment group it should be noted that each group within the program was monitored by a different teacher. Even though the assignments were generally the same for all students within the grade levels; teacher styles and expectations within the program were not uniform. For example, one teacher's expectations may focus mainly on academics during each session whereas another teacher allowed more socialization to take place during these sessions. Guidelines and expectations within the control group could not be monitored or controlled.
Discussion

The data suggests that although not significant there is a positive gain in the students' grade point average within the treatment group as the number of sessions increased. Although the results of this study should not be used to determine the effectiveness of the after-school program a follow-up study with an increased number of sessions would be valuable in assessing the effectiveness of this program.

Research indicates that there is a growing need for quality after-school programs. Since this is an after-school program further research and study should be completed on the need of after-school programs in this school district. Research also indicates that peer tutoring can be beneficial to both the tutor and tutee. Further study of this component of the program should be completed as well. This study and research would help administration when assessing the effectiveness of the program and making recommendations for the implementation of this program in the future.
References


Carlisi, A.M. (1996). *The 3:00 Project Program Evaluation.* Georgia School-Age Care Association, Decatur, GA.


Kaiser Family Foundation Report. (1999). "Kids & Media @ the New Millennium." Survey conducted by the Kaiser Family Foundation in conjunction with Harris Interactive, Inc.


